

FATAL CONFUSION: A Troubled Emergency Response; 9/11 Exposed Deadly Flaws In Rescue Plan

This article was reported and written by [Jim Dwyer](#) and [Kevin Flynn](#), July 7, 2002

Minutes after the south tower collapsed at the World Trade Center, police helicopters hovered near the remaining tower to check its condition. "About 15 floors down from the top, it looks like it's glowing red," the pilot of one helicopter, Aviation 14, radioed at 10:07 a.m. "It's inevitable."

Seconds later, another pilot reported: "I don't think this has too much longer to go. I would evacuate all people within the area of that second building."

Those clear warnings, captured on police radio tapes, were transmitted 21 minutes before the building fell, and officials say they were relayed to police officers, most of whom managed to escape. Yet most firefighters never heard those warnings, or earlier orders to get out. Their radio system failed frequently that morning. Even if the radio network had been reliable, it was not linked to the police system. And the police and fire commanders guiding the rescue efforts did not talk to one another during the crisis. Cut off from critical information, at least 121 firefighters, most in striking distance of safety, died when the north tower fell, an analysis by The New York Times has found.

Faced with devastating attacks, the city's emergency personnel formed an indelible canvas of sacrifice, man by man and woman by woman. They helped rescue thousands. They saved lives. They risked their own.

From the first moments to the last, however, their efforts were plagued by failures of communication, command and control.

Now, after months of grief, both the Fire and Police Departments are approaching the end of delicate internal reviews of their responses to the attack. Those reviews have concluded that major changes are needed in how the agencies go about their work and prepare for the next disaster, senior officials say.

A six-month examination by The Times found that the rescuers' ability to save themselves and others was hobbled by technical difficulties, a history of tribal feuding and management lapses that have been part of the emergency response culture in New York City and other regions for years.

*When the firefighters needed to communicate, their radio system failed, just as it had in those same buildings eight years earlier, during the response to the 1993 bombing at the trade center. No other agency lost communications on Sept. 11 as broadly, or to such devastating effect, as the Fire Department.

*Throughout the crisis, the two largest emergency departments, Police and Fire, barely spoke to coordinate strategy or to share intelligence about building conditions.

*During those final minutes, most firefighters inside the north tower did not know the other building had crumbled, and how urgent it was for them to get out. Instead, dozens

of firefighters were catching their breath on the 19th floor of the tower, witnesses say. Others were awaiting orders in the lobby. Still others were evacuating the disabled and the frightened.

*To this day, the Fire Department cannot say just how many firefighters were sent into the towers, and where they died. It lost track of them, in part because some companies did not check in with chiefs. Individual firefighters jumped on overcrowded trucks, against policy. Others, ordered off the fire trucks, grabbed rides in cars.

*The city's intricate network of safety coverage showed signs of unraveling that morning because of the headlong rush to Lower Manhattan. Police officers left their posts, senior police officials said. A chief with the Emergency Medical Service said they had no ambulances for more than 400 calls. The region's bridges, tunnels, and ports were drained of protection, said the chief of the Port Authority police.

*Although Mayor Rudolph W. Giuliani created the Office of Emergency Management in 1996 and spent nearly \$25 million to coordinate emergency response, trade center officials said the agency had not conducted an emergency exercise there that included the Fire Department, the police and the Port Authority's emergency staff.

The Fire Department began its first self-examination in December, when nearly 50 senior fire officials took part in a two-day planning exercise with the United States Naval War College. The college evaluators concluded: "As a function of command and control, it was evident that the Fire Department has no formal system to evaluate problems or develop plans for multiple complex events. It was equally evident that the Fire Department has conducted very little formal planning at the operational level."

Thomas Von Essen, the city's fire commissioner from 1996 through 2001, and a former president of the main fire union, said he agreed with that analysis, which was undertaken to explore the ability to respond to major disasters. The fire commissioner has limited authority to hold senior chiefs accountable, Mr. Von Essen said, because nearly all enjoy Civil Service protection.

"The pain is still there and it'll be there forever," Mr. Von Essen said. "But you have to start thinking about the reality of the world that we live in today. And that demands better leadership, more accountable leadership, a better-trained leadership, a more disciplined leadership that then filters down to a better-trained and more disciplined set of troops."

Many chiefs, for their part, have long cited Mr. Von Essen's leadership as a major department failing. The results of other reviews, covering police and fire performance, are due within a few weeks from the consulting firm McKinsey & Company.

For Mr. Von Essen, a searing topic is the high number of firefighter casualties in the north tower. The collapse of the south tower after 57 minutes shocked the fire commanders. Yet more than a third of the 343 firefighter deaths were in the north tower, even though it stood 29 minutes longer. The failure of more firefighters to escape in those 29 minutes baffles Mr. Von Essen. He believes many got word to leave.

"Should we know the answers to all of that stuff by now? Absolutely," Mr. Von Essen said. "But do we really want to know the answers to these questions? I don't think the department really wants to know."

He could not explain why the police had not reported to fire commanders, the official leaders of the response. "That day the police did not hook up with the Fire Department," Mr. Von Essen said. "I don't know why."

Too many firefighters, he said, were sent into the towers, and too many came without being told they were needed. "I've been a firefighter since 1970, and have often stood on floors where we needed 10 people and had 30," Mr. Von Essen said. "There's a lack of control that's dangerous on an everyday basis to firefighters."

Police Commissioner Raymond W. Kelly said the eagerness to respond could put both police officers and the city at risk. "People got on the subway and came down," he said. "We need a much more controlled response these days. Why? Because we have to be concerned about secondary events."

Both Mr. Von Essen and Mr. Kelly said rigorous scrutiny of their agencies was vital. "We should not second-guess the people at the scene, or the way they handled it that day -- they did a terrific job at the scene, and you will not find better chiefs anywhere in the country than the ones who ran things," Mr. Von Essen said. "I think we should second-guess our procedures, our policies, our history."

Mr. Kelly, who led the police a decade ago and returned in January, said: "Now, literally, that the dust has settled, we are obligated to look at these things and to learn lessons. We are in the business of emergency response. That's our business, every day. We have to think in a systematic way."

To explore the emergency response on Sept. 11, Times reporters interviewed more than 100 firefighters, police officers, emergency medical workers, government officials and witnesses. Those interviews were supplemented by reviews of 1,000 pages of oral histories collected by the Fire Department, 20 hours of police and fire radio transmissions and 4,000 pages of city records, and by creating a database that tracked 2,500 eyewitness reports of sightings of fire companies, individual firefighters and other rescue personnel that morning. The city has refused to release thousands of pages of accounts by firefighters and their superiors.

On Friday, Fire Commissioner Nicholas Scoppetta said the city intended to create a radio channel that could be shared by police officers and firefighters, among other changes. "There is no question there were communications problems at this catastrophic incident," he said.

Bernard B. Kerik, the police commissioner at the time, said he did not believe that any communication problems between the agencies had significantly affected their performance. "I was not made aware that day that we were having any difficulty coordinating," he said.

Communications, 'Down to the Lobby,' But No One Came.

Battalion Chief Joseph Pfeifer held his two-way radio to his ear. He tried to edge away from the noise in the north tower lobby, hoping the reception would improve. Still no good. Minutes before, he stood on a street corner in Lower Manhattan and watched as American Airlines Flight 11 flew directly overhead and crashed into the north tower of the World Trade Center.

Now, as the first chief to reach the building, he was sending fire companies up the stairs, including one led by his own brother, Lt. Kevin Pfeifer, who did not survive. Then he found that he had no way to speak with the rescuers starting the long climb: once again, the firefighters were having terrible radio problems inside this high-rise building. More than eight years earlier, hundreds of firefighters came to the World Trade Center after terrorists tried to bomb one of the towers off its foundation. "Communications were a serious problem from the outset," Anthony L. Fusco, then chief of the department, had warned in a 1994 federal report on the Fire Department's response to that attack. They had lost touch with firefighters trying to extinguish the smoldering bomb crater underground, and with others who had climbed clear to the top of the towers.

Now, Chief Pfeifer tried to turn on a device known as a repeater, which had been installed at 5 World Trade Center to help solve those problems by boosting the radio signal strength. The repeater didn't seem to be working, Chief Pfeifer said later. Another fire chief arriving at the trade center tried a second repeater in his department car. That did not work, either.

As hundreds of firefighters climbed toward the upper floors where 1,100 people were trapped, one communications post after another was proving unreliable. Even commanders spread among four separate posts could not get through.

"I wasn't getting communications and I couldn't communicate into the building," Deputy Assistant Chief Albert J. Turi, now retired, said in an interview.

By 9:30 a.m., after both planes had struck, a rumor was circulating that a third hijacked plane was headed to New York. Assistant Chief Joseph Callan recalled feeling the north tower move. "I made the decision that the building was no longer safe," the chief told the Fire Department's oral history interviewers.

"All units in Building 1," he announced over the radio at 9:32. "All units in Building 1, come out, down to the lobby. Everybody down to the lobby."

Virtually no one answered his call. It seemed that few people, apart from those standing near him, heard it. Chief Peter Hayden, who was at the scene, said: "We had ordered the firefighters down, but we weren't getting acknowledgments. We were very concerned about it."

When Assistant Chief Donald J. Burns arrived, he reminded his colleagues of the severe communication problems during the 1993 bombing, Chief Hayden recalled. Commanders were forced that day to rely on runners to deliver vital messages. "Pre-plan and build contingency plans," Chief Burns wrote in the 1994 federal report. "Our

effectiveness is only as good as our ability to communicate." On Sept. 11, he took command of operations in the south tower, the second building to be hit, and was killed.

The radios the firefighters carried into the buildings that day were identical to the ones they had brought into the trade center eight years earlier. By the department's own estimation, those radios, some of which were 15 years old, were outdated. "There were problems with the radios at virtually every high-rise fire," said Deputy Chief Nicholas J. Visconti, who was the commander in Midtown Manhattan for three years.

The radio problems, many officials say, are a symptom of the department's resistance to new technology. "We're dinosaurs," said Richard J. Sheirer, the former director of the city's Office of Emergency Management and a former fire dispatcher. David Rosensweig, the president of the fire alarm dispatchers' union, says the city has been talking for more than a decade about improving its computer-aided dispatch system.

Early in 2001, the department replaced its old analog radios with a new generation that used digital technology. The new models operated on higher frequencies and were judged somewhat better at penetrating buildings, but several firefighters said they had been unable to communicate in emergencies, so the digital radios were pulled from service in March 2001.

Other cities have been no swifter at solving the problems of communication at high-rise fires, industry professionals said.

The department did try to make some improvements after the terrorist bombing at the trade center in 1993, like the repeater installed on 5 World Trade Center to amplify the radio signal. The city police and Port Authority police have similar repeaters and neither agency experienced significant radio problems on Sept. 11, officials said.

Even now, the source of the Fire Department's radio problems remains murky. "I've asked five people in the Fire Department already, and I get a different answer from most of them," Mr. Von Essen said.

For a while, officials from the Fire Department and the Port Authority said the Fire Department repeater had been disabled by debris from the first plane. Now, however, Port Authority officials say they have proof that the repeater did work: tape recordings discovered in January or February with fire radio transmissions that were successfully routed through the repeater that day.

Some companies on higher floors were able to communicate. Squad 252 had been leaving the north tower, but it decided to help another company, Rescue 1, that was on a higher floor, said Firefighter Steve Modica, who heard the two companies talk over the radio. Neither company survived.

Other firefighters appear to have been using one radio channel while evacuation orders went out over another, according to the accounts of several firefighters.

In many other instances, firefighters said they simply never got the order to leave because the radio system worked only intermittently. Firefighter Modica said he tried different channels, without success, to reach a friend who had gone up ahead of him.

"It's a disgrace," he said. "The police are talking to each other. It's a no-brainer: Get us what they're using. We send people to the moon, and you mean to tell me a firefighter can't talk to a guy two floors above him?"

Command, Distrust Separates Police and Fire.

Almost an hour after the first plane struck, the wind shifted, and for a moment the blanket of smoke on the roofs of the towers lifted slightly. Perhaps there was a chance to save some people at the top of the buildings.

"As soon as it's feasible, we need to go on the roof," one police officer said on his radio. From the air, a second police officer replied: "Aviation 12, we're taking a look; we're going to look at the northwest corner of north building." On the ground, a team of police emergency service officers gathered rappelling outfits for the helicopters.

For fire chiefs, the police helicopters could also be invaluable: the firefighters' climb to the 80th floor during the 1993 attack lasted four hours, and the blaze in the north tower was 15 floors above that. Even if roof rescues proved too risky, as police commanders later decided, the fire chiefs wanted to see what the fires were doing to the buildings. "At one point, I was asked to get the operations with the helicopter into motion," Chief Pfeifer said in his oral history, but he could not reach the dispatcher.

He recited problems -- a missing radio, jammed phone lines, no one answering -- but the simplest solution of all was not available to Chief Pfeifer: a face-to-face conversation with a police supervisor. No police supervisors reported to the lobby command posts set up by the Fire Department to coordinate efforts. The police established their command post three blocks away at the corner of Church and Vesey Streets.

In the end, no firefighter boarded the helicopters. When police pilots reported "large pieces" falling from the south tower 10 minutes before it collapsed, only police officers had seen it from the sky, and only police officers on the ground could hear their warnings. When the pilots saw that the north building was near collapse 21 minutes before it fell, their warnings reached some police officers on the street and inside the tower, but not firefighters. Although the two departments had talked for years about establishing a common radio channel, they could not reach agreement.

Nearly every state, including New York, and the federal government have adopted a structure for managing crises known as the incident command system, in which agencies agree in advance who will be in charge. New York City has not. The Police and Fire Departments did not work together that day, and they rarely did before. Allen H. Hoehl, a retired police commander, disputed the idea that officers routinely refuse to work with fire officials. He said he had often designated a ranking officer to serve as a liaison.

Other police officials maintain that sharing command with the Fire Department is difficult because firefighters lack paramilitary discipline. Lt. John McArdle, a member of the police Emergency Service Unit, was blunt in his views of the firefighters. "If someone tells them to do something, they say, 'I don't work for him,' " he said in an interview. "If a police sergeant tells a group of cops to hold up, they do."

Senior fire chiefs spelled out their resentment of the police during the Naval War College evaluation in December. Asked about interagency cooperation, some in the senior fire staff wrote: "There is none"; "You will never change the P.D."; "Let them put snowplows on the front end of their cars. They want to do everything else"; "There's a reason people hate cops"; "Most agencies try to be cooperative, helpful, but the police have a very limited ability to cooperate."

After years of bickering, the two agencies did not squabble on Sept. 11. They simply did not communicate. "There was not a link," Police Commissioner Kelly acknowledged. Asked if the incident command system called for police, fire and other agencies to share a post, Commissioner Kelly said: "Well, it should. And we're getting there."

On paper, the Police and Fire Department have agreed since 1993 to share the police helicopters during high-rise fires, and to practice together. Neither agency has any records of joint drills, but Sgt. Mike Wysokowski, a police spokesman, said that members of the police Aviation Unit believed a "familiarization flight" was conducted for the Fire Department a year, or perhaps a year and half, before Sept. 11.

No familiarization flights were taken from Sept. 11 through mid-June, he said. As important as helicopter access might have been on Sept. 11, the gulf between the two departments is formed around everyday, earthbound business.

On that morning, the Police Department's elite Emergency Service Unit sent teams into both towers. Trained in rescue tactics, the E.S.U. police officers often tackle the same kinds of work as firefighters.

In the stairwells, members of both services helped each other carry equipment, administer first aid and pass messages.

The police emergency officers did not, however, check in with the fire commanders who were in charge of the rescue.

"They report to nobody and they go and do whatever they want," said Chief Turi, who retired earlier this year as a senior safety officer for the Fire Department.

Control, Discipline Broke Down in Eagerness to Help.

News of the trade center attacks broke as shifts changed at firehouses across the city. At Ladder Company 16 on East 67th Street, four firefighters who were scheduled to go off duty wanted to stay and help. But Lt. Dan Williams told them "to get the hell off the rig," he said later. "Why? I took one look at the TV and I said, 'We're going to lose people here today.' There was no doubt in my mind.

"A person can control a certain amount of people," he said. "I was in the military, the Marine Corps, for four years, in Vietnam. So I was thinking that way. I'm not putting anyone else down there. We're going to be in enough danger without putting more people in a situation like that. I didn't say it nicely. I said, 'Get off the rig.' "

The men got off. Then they went outside and caught rides to the trade center in a police car and a city bus. One was killed in the collapse of the north tower.

He was among the 60 off-duty firefighters to die. Some came from second jobs, one from a golf course. Many bypassed staging areas and commanders with whom they were supposed to check in, fire officials said. Several on-duty companies led by veteran officers did the same.

Those who responded so impulsively were upholding the Fire Department's finest tradition: the selfless struggle to save the endangered. But they were also rushing to fight a fire that department officials had already decided was unfightable. And they did so in such numbers, with so little coordination, that some fire officials are now questioning whether the department known as the Bravest acted too bravely that day. "Courage is not enough," Mr. Von Essen said. "The fact that the guys are so dedicated comes back to hurt them down the line."

Many officials now say the city needs a more measured and disciplined response, which would allow officials to hold back resources in case of a second incident. "You have to train them," said the Port Authority police chief, Joseph Morris. "You can't have everybody coming in."

Port Authority police officers also flocked to the scene, leaving posts at bridges and tunnels, Chief Morris said. Ambulance crews converged on Lower Manhattan, leaving much of the city sparsely covered. At one point, the city's Emergency Medical Service had no ambulances for some 400 backed-up emergency calls, its senior officer on duty, Walter Kowalczyk, said later. Fire officials said that just after the collapses, more than 100 ambulances, nearly one-third of the fleet on duty, went to the buildings.

"As we've said at so many funerals, cops and firemen run in when everybody else runs out," said Commissioner Kelly, adding, "So when you say, 'Hey, we don't want you to go,' it is really contrary to the reason why you signed on for this kind of work."

The Naval War College analysts found that the lack of planning left the Fire Department vulnerable to losing control at a major disaster. "It was clear," the college's report said, "that the responses above the tactical level are largely handled 'on the fly,' with tremendous gaps in command and control."

The loss of control was not evident in the demeanor of commanders on Sept. 11; videotapes show them responding calmly to crises. Later, though, some firefighters spoke of an aimlessness to the efforts. "Nobody had a plan," said Firefighter Modica, an aide to a chief lost in the north tower.

When Jay Swithers, a captain and paramedic assigned to the Fire Department's Bureau of Health Services, arrived at a triage center operated by the Emergency Medical Service, he could not find Fire Chief Raymond M. Downey, who led the Special Operations Command and whom Captain Swithers would be working with.

"Nobody could tell me where he was," Captain Swithers said in an oral history. "Most of the E.M.S. people didn't know what special command was or who Chief Downey was."

The chief died in the collapse.

Certainly, the attacks exceeded anything emergency planners had anticipated. In the West, some fire departments have coordinated massive responses to brush fires. But in New York, mock disaster drills rarely draw more than 100 firefighters. On Sept. 11, the department used nearly 1,000.

"On that day, Sept. 11, all the plans, all the scenarios that we had developed, everything, everything was blown up," James Ellson, a former deputy in the city's Office of Emergency Management, said recently.

Senior fire officials said that even as they drove to the towers they knew the fire was too large to fight. "It was evident that we weren't going to be able to get to people above the fire," Thomas Fitzpatrick, a deputy commissioner, said in his oral history.

In the confusion, though, firefighters continued to charge up the stairs with lengths of hose that weighed 38 pounds. Some suffered chest pains. Others could not tell one building from the other. Such confusion occurred so often that Chief Pfeifer had "Tower 1" written in marker on the command post in the north tower lobby. And no one in authority ever realized that a stairwell was open in the south tower. At least 18 people ultimately escaped from above the impact zone that way, but word of their route never reached hundreds of others trapped above.

Over all, however, nearly everyone below the floors where the planes struck escaped, helped by rescuers. Sharon Premoli, an executive vice president with Beast Financial Systems, said she was comforted by the sight of the ascending firefighters.

"I felt better, I felt safe," she said. "They were the reason."

Lt. Brian Becker, who escaped from the north tower with his unit, Engine Company 28, said it was simplistic to view the day in terms of heroism or blame.

"It was a series of random events that killed thousands and saved hundreds," he said. "Not many people did anything right that day, but not many people did anything wrong that day either."

Even today, fire officials cannot say where many firefighters died, in part because the magnetic command boards, which the department used to track companies, were lost in the collapses. The Times tried to track those locations using a database that compiled more than 2,500 sightings of fire companies and individuals.

Based on those eyewitnesses, The Times concluded that 33 fire companies, which lost 121 men, were operating in the north tower when it collapsed. Of the other firefighters who died, the eyewitness accounts placed 97 in the south tower, 34 in the Marriott Hotel and 13 outside the building.

The locations of 78 firefighters could not be traced. Fire Department records indicate that many of them had been assigned to the south tower.

Sacrifice, 'We'll Come Down In a Few Minutes'.

Above the impact zone, 800 people were trapped. Below it, the dying north tower was emptying. After more than an hour of evacuation, the stream of civilians was a trickle.

Then the south tower fell, and people watched around the world.

Not across the plaza. There, the crash registered only as a shudder in the bones of people up and down the north tower. "Everybody felt it and they didn't know exactly what it was," Firefighter Frank Campagna said in an oral history interview.

"The building was still standing," he said. "So we just kept going up the stairs." On the 51st floor, three court officers felt the violent lurch and decided to get out. "We did not know that the south tower collapsed -- never mind that the north tower was going to go," said Deputy Chief Joseph Baccellieri, who had rushed into the tower along with two other court officers, Sgts. Alfred Moscola and Andrew Wender. The three started down.

By that time, firefighters had been climbing stairs for more than an hour. Their mission seemed unclear. After the collapse, Chief Pfeifer radioed an order to get out. That message and others reached chiefs on some floors, but not on others. No firefighters appeared to have the hard information the police got. None seemed to know that the other building had gone down. Only a handful heard directly that they should leave.

"There definitely were firefighters that we were picking up on the way down that had no knowledge," said Lt. Warren Smith of Ladder 9. "They were, like, they didn't believe us." "Definitely, the sense of urgency was a huge factor in your ability to get out of there," Lieutenant Smith said. "I don't know what you could attest that to. Experience? Knowledge of the fact that the other building went down; did you have that knowledge? I don't think a lot of guys did."

On the 35th floor, Lt. Gregg Hansson of Engine 24 had just spoken with Battalion Chief Richard Picciotto, when a cry of "Mayday! Evacuate the building" came over the chief's radio. "I get about halfway down the hall and the building starts shaking," Lieutenant Hansson said in an interview.

Chief Picciotto hollered "Mayday!" to the four other fire companies on the 35th floor. Lieutenant Hansson and his men went to Staircase A. In the stairwell, they saw Lt. John Fischer of Ladder 20, who noticed that two of his men had continued up. "He couldn't get them on the radio, so he went to walk up and go get them," Lieutenant Hansson said. "I said, 'All right, well I'm going down, I'm taking my men down.' And that's the last time I saw him."

Somewhere around the 28th or 30th floor, Firefighter Campagna, who had kept climbing after the first tower fell, ran into a crowd of resting firefighters. "A chief came down from a floor above with another company and said, 'Everybody evacuate, everybody out now,'" he recalled. Firefighter Campagna and his company, Engine 28, turned around, and all survived.

Lieutenant Hansson stopped at the 27th floor to pick up a firefighter who had stayed with a man in a wheelchair and his friend. Then Capt. William Burke Jr. of Engine 21 arrived. "Somehow, it was decided that Captain Burke was going to take them down," the lieutenant said. The captain and the two men were killed.

As the court officers made their way down, they were hearing urgent evacuation messages through police officers' radios, Sergeant Wender said. On the 19th floor, they came upon a sight they recall vividly. "The hallway was filled with firemen," Sergeant Wender said. "Some of them were lying down. Ax against the wall. Legs extended. Arm resting against their oxygen tank. Completely exhausted. It led me to believe they were not hearing what we were hearing."

Chief Baccellieri recalled seeing "at least 100 of them." When he shouted that rescuers were evacuating, no one moved. "They said, 'We'll come down in a few minutes,' " Chief Baccellieri said. "These firemen had no idea that the south tower collapsed."

Sergeant Moscola also said they did not move quickly when urged to go. "They said, 'Yeah, all right, we'll be right there.' "

Fire Lieutenant Hansson stopped on this floor, but recalled seeing about 25 people, most of them firefighters. "An unknown firefighter pops out of the hallway, and says, 'I need some help. We've got a lot of people on the other part of the floor who aren't leaving.' " One firefighter pointed to the devastation out the window. "I don't think we can get out," Lieutenant Hansson said the firefighter told him.

Lieutenant Hansson said he urged them to leave, and thought some listened. "In my mind, people weren't moving quick enough for what I thought was necessary," he said. "I had the benefit of knowing that there was an evacuation, that there was a Mayday. Other people didn't hear that."

As Firefighter Campagna passed through the lobby, he saw more firefighters. "Everyone is standing there, waiting to hear what's going to happen next, what's going on," he said. As the court officers passed through the lobby, they saw about 10 firefighters. "We made it by seconds," said Sergeant Moscola.

Near the lobby, Lieutenant Hansson and his men helped remove a heavy man with some Port Authority police officers. They tied the man to a chair with a belt. They barely made it through the door when the tower began collapsing.

Among those who escaped with little time to spare was Susan Frederick. After descending from the 80th floor to about the third, she found the stairway blocked. Behind her, some three dozen people stretched up the stairs.

Minutes later, word spread, person to person, up the line, Ms. Frederick said: "We found a way out." A firefighter had broken through an office wall with an ax.

Daylight filtered faintly through the hole, pointing to the mezzanine and the street. "Come this way -- move quickly!" the firefighter yelled, Ms. Frederick said. He lighted the path with his flashlight. As she made it onto the street, she glanced at her watch, she recalled. It was 10:24 a.m., four minutes before the north tower collapsed. The firefighter did not exit with them.

"He stayed there because there were more people behind us," she said.