The 72nd Street Plane Crash

by Deputy Chief John Sudnik, Division 3 Commander

The morning of October 11, 2006, was anything but routine for the FDNY. As off-duty members in firehouses across the City were donning their Class A uniforms for the annual FDNY Memorial Day services, they heard about the fourth-alarm taxpayer fire being fought in the Bronx. And, during the ceremony that commemorates all those who made the Supreme Sacrifice in the line of duty, they had a chance to reflect on the welfare of those battling this difficult blaze.

Only a few short hours later, however, once again, they would consider the safety of FDNY members as the local media began reporting a plane crash into a high-rise building on East 72nd Street in Manhattan. Both local and national news programs displayed multiple floors of fire near the top of a high-rise building, eerily reminiscent of five years prior and the worst tragedy in FDNY history. However, FDNY members and people across the nation were about to witness on live television the FDNY responding once again with bravery and determination.

Conditions on arrival

At 1443 hours, Engine 44 responded from quarters and was the first unit to arrive on the scene. As they pulled up to 524 East 72nd Street, members encountered a large quantity of burning debris and a heavy smoke condition at the street level in front of the building. Initially unable to notice the conditions on the upper floors of the building, Lieutenant Ed Ryan, Engine 44, transmitted the signal 10-75 at 1447 hours. However, as the apparatus proceeded to the hydrant and upwind from the smoke, the large volume of fire on the upper floors of the building became more readily apparent. In anticipation of the need for additional help, he transmitted a 10-77 at 1447 hours for a fire in a high-rise multiple dwelling.

Approximately two minutes after the arrival of the first engine company, Ladder 13 arrived on the scene. When members approached the front of the building, they found conditions so precarious that Lieutenant Tom Landau, Ladder 13, initially considered using an alternate route into the lobby. Realizing that this would result in an undue delay, he ordered his members to don their SCBA facepieces, crawl behind the burning debris and enter the building through the lobby entrance.

photo by Heather E. Smith

Conditions that FDNY members found on arrival.

The initial dispatch reports and severe conditions on arrival indicated to the first-arriving units that they would be confronted with the following challenges: an aircraft of some sort had crashed into the building; heavy fire was showing out multiple windows on two upper floors and possibly exposing a third floor; and bricks, glass and metal window framing were falling from the upper floors onto the sidewalk, directly in front of the building lobby. This prompted Assistant Chief Howard Hill--on the scene at about the same time as Ladder 13--to request additional resources with the transmission of a 10-76 signal, also at 1447 hours.

Initial size-up

As units responded in, the Manhattan dispatcher reported receiving numerous phone calls for a plane crash into a building. Responding units also were informed of multiple calls for an explosion at the same address. This created a heightened sense of situational awareness for first-responding units, as they initially considered that the incident could be a terrorist attack. Arriving at the scene, they employed their RAD-50 and Ludlum meters to rule out the possibility of a radiological incident. Additionally, when Haz-Mat 1 arrived on the scene, the entire area in and around the fire building was monitored for chemical, radiological and explosive hazards. Fortunately, no abnormal meter readings were reported. A positive indication of any one of these hazards would have raised suspicion and forced a change of tactics.

The structural stability of the building was addressed immediately by first-responding units. It was apparent from the amount of bricks and debris on the sidewalk in front that at least some structural damage was caused by the plane striking the building. However, since both the exact size of the aircraft and the extent of the fire could not be determined, it was not feasible to accurately estimate from street level the amount of such damage.

Well aware of the danger presented by this potential hazard, Lieutenant Tony Tarabocchia, Rescue 1, promptly asked the dispatcher to special-call a helicopter to survey the exterior of the building. While still responding, Deputy Chief John Sudnik, Division 3, acknowledged this and requested the response of the Air Recon Battalion. Pending arrival of the helicopter, Battalion Chief Robert Holzmaier, Battalion 11, the designated Safety Coordinator, was directed by Chief Sudnik to access nearby buildings of similar height to provide a better assessment of the fire building's structural integrity.

The building's floor numbering system caused some initial confusion. The problem was that the nominal number of floors did not conform to the actual number of stories. More specifically, the floors above the lobby were designated two through 12 (occupied by the Hospital for Special Surgery), then 22 through 46 and PH one through PH four (residential occupancy). There were no floors in the building designated 13 through 21, a total of nine floors. Although fire was reported on the 40th floor, it was actually placed just 31 stories above ground level. (This concern has been addressed. Intro 496--floor numbering--was signed into law on June 14. Additionally, Intro 553 requires the Department of Buildings to notify the FDNY of any permits for construction, demolition, alteration or other work that affects a building's certificate of occupancy.)

First-arriving units were advised by building personnel that the fire was on the 40th floor, information later confirmed by the first-arriving engine company. However, from his exterior vantage point, Chief Hill observed that the fire was only approximately 30 stories above ground level. So, to rule out the possibility of fire being below the units operating on the 40th floor, he assigned Engine 39, the second-due engine company, to check on condi-

tions on the floors around the nominal 30th floor. Finding no fire at that location, Engine 39 members reported back that the search results were negative.

Unit operations

40th Floor--As a precautionary measure, Engine 44 and Ladder 13 took the elevator to the 30th and 35th floors, respectively. They then proceeded up to the 40th floor via the stairs, checking each floor along the way. These safety measures proved to be prudent, given the nature of the event and the unconventional way the floors were designated.

Arriving at the 40th floor, Engine 44 members located the fire in apartment 40F and reported this information to the Incident Commander (IC). With fire buckling the steel door and visible through the peep hole, it was evident that conditions in the apartment were severe and firefighting operations would be arduous. However, once Ladder 13 forced open the door, Engine 44 moved in with the hose-line and aggressively extinguished the fire in all four rooms in apartment 40F. (Engine 44 members received the Lieutenant James Curran/New York Firefighters Burn Center Foundation Medal on June 6, 2007, for their actions at this fire.)

While Ladder 13 was conducting a primary search, Lieutenant Landau noticed heavy fire still venting out of multiple windows to the east on the 40th floor. Additionally, when Lieutenant Ryan, Engine 44, reported that all visible fire was knocked down in the fire apartment, the IC advised him that there was still fire showing out windows on that floor and the floor above.

Lieutenant Landau, Ladder 13, quickly retraced his steps, searching apartment 40F for a room with fire that could have been missed. He made his way back to the public hallway and found smoke pushing around the door of apartment 40ABG. He now determined that apartment 40ABG wrapped around the elevator shaft to adjoin apartment 40F. (Later, it was verified that apartment 40ABG was, in fact, three apartments combined into one.)

Ladder 13 then breached a small hole in the sheetrock wall between the two apartments that was large enough for Engine 44 to operate the nozzle. Once Engine 44 extinguished some fire in the room, the hole was enlarged to accommodate their advancement deeper into apartment 40ABG and final extinguishment of all visible fire on the 40th floor. Primary searches on this floor were conducted by the members of Ladder 13 and Rescue 1. All primary and secondary searches on the entire 40th floor were reported negative.

During overhaul operations in apartment 40ABG, it was discovered that a two-inch gas line had been severed by the impact of the aircraft. It later was determined that this natural gas source had contributed to the severity of the fire in this apartment. This condition was promptly alleviated with the isolation of the gas supply and Con Ed was requested to respond.

41st Floor--As additional units entered the building lobby, they reported to Battalion Chief Charles Williams, Battalion 9. Chief Williams then assigned these units to Battalion Chief Thomas Meara, Battalion 8, on the 39th floor. On their arrival at that location, Chief Meara informed them of the heavy fire conditions and undetermined structural damage on the 41st floor. They also were advised that a carefully measured, yet quick and aggressive, attack on the advanced fire would be necessary to prevent it from auto-exposing the 42nd floor and possibly higher.

Engine 23, the first engine company to report in to Battalion 8, immediately was assigned to attack the fire on the 41st floor. While his members were stretching a line, Captain Dave Morkal, Engine 23, checked out the conditions on the 40th floor. He found them favorable, with only a medium smoke condition in the public hallway and Engine 44 ready to move into apartment 40F. He then led his members to the 41st floor, after informing Engine 44 of his intention to take the second hose-line above.

Making progress.

All visible fire extinguished.

photos by the FDNY Photo Unit

As units commenced their attack, Battalion Chief Jack Spillane, Rescue Operations Battalion, arrived on the 41st floor and took command of operations on that floor. When the roof Firefighter from Ladder 13 forced the door to apartment 41F, heavy fire conditions were found just inside. The door was kept closed until Engine 23 had their hose-line in position and ready to move in.

When Engine 23 began their aggressive advance through the fully involved apartment, Chief Spillane directed Lieutenant Charles McCormack, Ladder 2, and his members to make a primary search. After Engine 23 reported all visible fire knocked down, it was discovered that apartment 41F was not the only apartment on the 41st floor involved in fire. When the smoke had lifted, Captain Morkal, Engine 23, noticed that there was still heavy fire venting out the windows of an adjoining apartment, similar to the situation that occurred on the 40th floor.

Back out in the public hallway, members from Ladder 2 and Rescue 1 were directed to force entry to the adjoining apartment. They began forcing a door marked "41A," but found metal studs and sheetrock behind it, an indication of a renovation with two apartments combined into one. They were able to open it enough, however, to determine that there was a heavy fire condition in the apartment. Unable to gain access through this door, they continued their search and found another means of entry through a door marked "41AG."

Moments later, Ladder 35, under the command of Lieutenant Joseph Loftus, arrived on the 41st floor, ready to assist with the primary searches. By this time, Engine 23 members already had backed their hose-line out of apartment 41F and into the public hallway, ready to move into this fully involved apartment. Again facing extreme conditions, Engine 23 aggressively extinguished all visible fire throughout apartment 41AG. As a safety precaution, Captain Morkal ensured that all members were kept at a safe distance from the exterior curtain wall, which had been severely damaged by the impact of the plane.

Additional units

As additional units reported into the Lobby Command Post, they were assigned to the Staging Area on the 38th floor. Some units were used to conduct primary and secondary searches on all floors and stairwells above and below, all elevators and around the perimeter of the building. Other units were used to provide much-needed relief for the first-alarm units.

The location of an explosive canister used to activate a parachute became a main concern once the type of aircraft had been identified positively. Since it was determined that the parachute had not deployed prior to the crash, it was believed that the canis-

Damaged apartments. Firefighters sift through debris.

ter was still intact and dangerous. NYPD was tasked with the search for this device and all units on the scene were notified to be on the lookout for this hazardous condition. The incident was placed *Under Control* at 1634 hours.

Although the fire had been extinguished on two floors in relatively short order, the overall operation lasted well into the night. Command Chief, Deputy Assistant Chief Joseph Pfeifer, assumed command of the continuing operations. He maintained sufficient units on the scene to assist personnel from the Bureau of Fire Investigation (BFI), NYPD, NYC Department of Buildings (DOB) and the National Transportation Safety Board (NTSB). When the BFI concluded its investigation, incident command was transferred to NYPD hours later, for investigative purposes.

Incident Command

Command--Within minutes of the crash, Chief of Department Salvatore Cassano arrived on-scene at 1450 hours and assumed command of the incident. As IC, he was responsible for defining the incident objectives--among the most important of which included ensuring the safety of the members and the public--accurately reporting the progress of FDNY operations to the Mayor's office and the media and providing for coordination and cooperation between the FDNY and the many assisting agencies on the scene.

The incident command system provided for a Command Staff consisting of a Safety Officer, an Information Officer and a Liaison Officer. The members assigned to these positions reported directly to the IC. The Safety Officer, Deputy Chief Thaddeus Jankowski, was responsible for overall scene safety. He was primarily concerned with establishing a collapse zone around the building and the examination of parked vehicles by NYPD for secondary devices. The Safety Battalion and Safety Coordinator, the designated Assistant Safety Officers for the incident, ensured safe operating conditions inside the building on the fire floor and floors above. The Information Officer, FF Jim Long (PIO), helped control the flow of information between Fire Commissioner Nicholas Scoppetta and Chief of Department Salvatore Cassano and the media. Two Battalion Chiefs were special-called and designated as Liaison Officers to represent FDNY at the on-scene, inter-agency meetings set up by the New York City Office of Emergency Management (OEM).

Metal studs behind door, indicative of renovations.

Operations--When Chief of Operations Patrick McNally arrived on the scene at 1455 hours, he took responsibility for all tactical decisions and assumed the position of Operations Section Chief. Chief McNally continued to use Chief Hill to assist in the Operations Section, assigning him the duties of the Fire Branch Director. All activities inside the building on the 40th, 41st and 42nd floors were the responsibility of Chief Meara, the Fire Suppression Group Supervisor.

The coordination of all searches in the area above fire operations was the task of the Search and Evacuation Group Supervisor, Battalion Chief Steve Browne, Battalion 12. The important functions of triage, treatment and transport for injured civilians was delegated to the Medical Group Supervisor, the highest ranking EMS Officer on the scene. The Air Recon Chief was tasked with surveying the building for signs of structural damage and the presence of victims on the roofs of setbacks.

Two staging areas were established--one inside the building on the 38th floor and the other on York Avenue and 72nd Street for units responding on the third and fourth alarms. Each staging area was supervised by a Battalion Chief designated as a Staging Area Manager.

Planning--When Chief Sudnik arrived on the scene, higher ranking Chief Officers already were in command of the operation. Tasked with the responsibility for managing resources and providing accountability for all units, he assumed the duties of the Planning Section Chief. The first-to-arrive Battalion Chief, Chief Williams, took a position in the lobby and assumed the role of Deputy Planning Section Chief. At the request of the Operations Section, Chief Sudnik assigned additional resources from the York Avenue Staging Area to Chief Williams in the lobby, who, in turn, assigned them to the Forward Staging Area on the 38th floor.

A Battalion Chief was designated the Resources Unit Leader and assisted Chief Sudnik with the collection of situation and resources status information. The Field Communications Unit assumed the duties of the Documentation Control Unit and recorded the status of all units operating, relieved and on recuperation and care (R&R).

Logistics--Battalion Chief Peter Hart, Battalion 7 (detailed to the Research and Development Unit), arrived on-scene and provided logistical support for Operations, particularly with radio communications. He ensured that all communications equipment was operating properly and efficiently. At this incident, four different radio frequencies were employed: the primary tactical channel, the primary command channel, the Manhattan borough frequency and the City-wide interoperability channel.

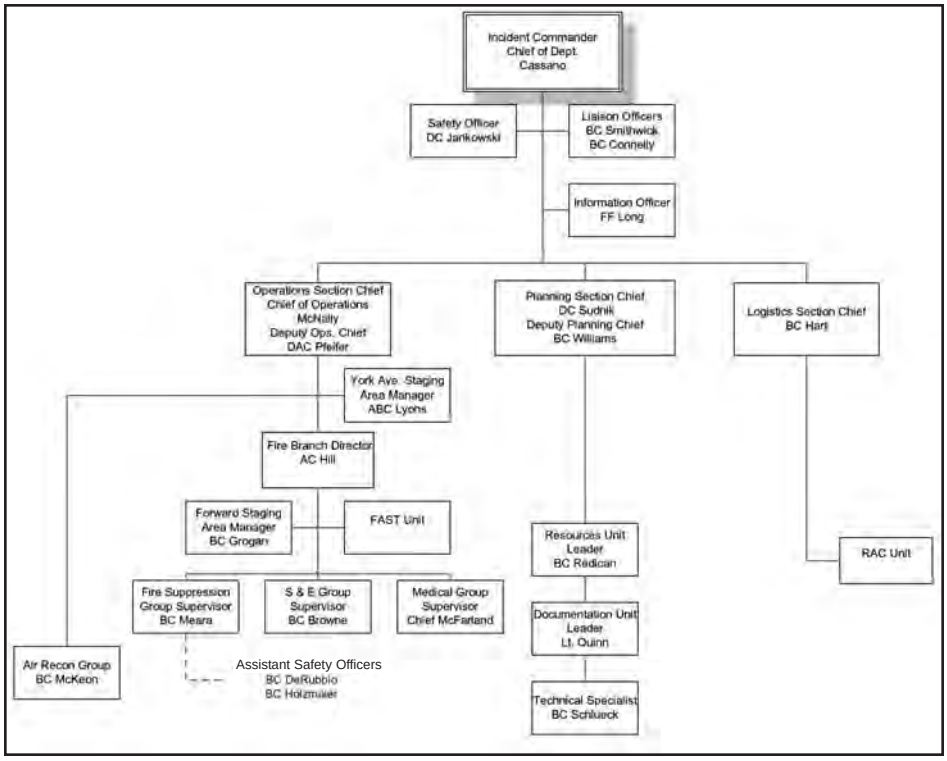
At large-scale incidents, the IC may assign a Chief Officer the position of Logistics Section Chief, whose task is to manage all incident logistics. The High-Rise Unit, the Tactical Support Unit, the Mask Service Unit, the Recuperation and Care Unit (RAC), designated EMS units, the Red Cross canteen, an MTA bus used for shelter during inclement weather and Fleet Maintenance personnel are examples of resources commonly used by the FDNY at multiple alarms that would necessitate activation of a Logistics Section Chief.

Lessons learned/reinforced

- Size-up begins with receipt of the alarm and continues until the fire is under control. Non-routine or uncommon dispatch information could indicate a terrorist incident. In these instances, units equipped with meters that detect chemical, radiological or explosive atmospheres should activate them prior to leaving quarters. Chief Officers should transmit a signal 10-80 with the appropriate code to ensure the response of Haz-Mat #1 and the

Haz-Mat Battalion. If terrorism is suspected, request that NYPD perform a perimeter search for secondary devices.

- First-arriving units should take control of the elevators using Fireman Service. When Fireman Service is activated, a designated member must be assigned to operate the elevator until relieved. The Lobby Control Unit will assume command of all elevator operations when they arrive on-scene. Additionally, Chief Officers should anticipate that water from hose-lines will adversely affect the operability of elevators. At upper-floor fires, a sufficient number of units should be sent to the Forward Staging Area early in the operation while the elevators are still intact.
- First-arriving units must designate a stairway to be used as an attack stair. Once the attack stairway is selected, all hose-lines should be stretched and operated from this stairway. The door leading from the public halls to the evacuation stair must be kept closed on the fire floor.
- The secondary search must be painstakingly thorough and complete. Specific units should be assigned to conduct searches around the entire perimeter of the building, including any building setbacks. At major high-rise incidents, the Operations Section Chief may use the Air Recon Chief to assist with these searches.
- Whenever a severe impact load is placed upon a building (i.e., explosion, aircraft, motor vehicle, etc.), its structural integrity must be assessed immediately. When there is danger from falling debris, collapse zones must be established around the affected areas of the building and the Incident Command Post set up at an unexposed location outside. When damage is sustained on the upper floors of a high-rise building, the Safety Officer may find it beneficial to use the Air Recon Chief to assist with the structural evaluation.
- The Post radio is used primarily during high-rise operations. All Battalions should report into the Command Post with a Post radio. The Post radio also can be used in conjunction with a Battalion vehicle cross band repeater. In order to reduce the amount of handie-talkie traffic and maintain adequate span of control, the Incident Commander must initiate use of a Command Channel early in the operation. All units are reminded that the Command Channel is reserved for Chief Officers and is not to be used for routine tactical transmissions.
- With the transmission of a third alarm, a Staging Area must be established remote from the Command Post. Major incidents in high-rise buildings may require setting up two staging areas, one inside the building and one outside. A Battalion Chief designated as a Staging Area Manager must be assigned to each. When calling a particular Staging Area Manager on the handie-talkie, the specific Staging Area must be identified (i.e., "Forward Staging," "York Avenue Staging," etc.).
- At large-scale incidents, the IC should anticipate receiving numerous inquiries from the media and local politicians. At high-profile incidents that generate significant and prolonged media attention, the FDNY public information officer (PIO) will respond to assist the IC manage questions from the press. In addition, when representatives from the Mayor's Office are on-scene, the IC may need to verify important information quickly and accurately.
- During routine building inspections, units should employ the Critical Information Dispatch System (CIDS) program. The main purpose of CIDS is to identify dangerous and hazardous conditions that are not necessarily apparent from the front of the building. There are many existing buildings in Manhattan in which the floor numbering system does not conform to the number of stories in the building. The odd layout and stair numbering can adversely affect operations. This type of information is beneficial to all units responding in.



Members are urged to read "Using the FDNY Post Radios," by Battalion Chief Peter J. Hart, in the 1st/2007 issue of *WNYF*.

Commendation

All FDNY members who operated at this four-alarm fire are to be commended for their bravery and initiative. With reports of a plane into a building, first-alarm units were confronted with the potential of a terrorist attack and the resulting stress created by those concerns. Moreover, structural damage to the spandrel wall separating the two involved floors made operations particularly dangerous. The fact that there were no additional fatalities or serious injuries after FDNY arrival is testimony to an outstanding operation.

In the FDNY, there is no greater compliment than one received from peers. While off-duty members attended Memorial Day collations and festivities following the ceremony, many found their attention affixed to a TV set and the FDNY in live action. Just like watching a ball game where the home team wins after a walk-off home run, they stood up and cheered as white smoke, steam and water began to appear from the upper-floor windows. They had just witnessed FDNY units at their best--aggressively attacking two floors of a hydrocarbon-fed fire resulting from a plane crash into a building 30 stories above street level.

About the Author...

Deputy Chief John Sudnik is a 21-year veteran of the FDNY. He is the Division Commander of Division 3. He holds a bachelor's degree in Finance and Economics from CUNY--Baruch College and a master's degree in Homeland Security from the Naval Postgraduate School. This is his second article for WNYF.