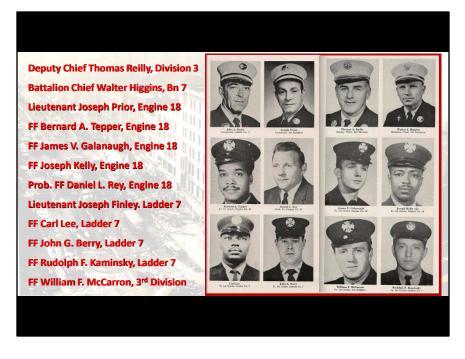


October 17th of 1966 was a most tragic and mournful day in the history of the New York City Fire Department (FDNY). This would be a day that claimed the lives of 12 members of the department and touch the heart and soul of every member of the department.

It was a Monday evening when a call would be made to the 911 call center of Manhattan from the tenants of 7 East 22nd street reporting a smoke condition. This would be a little past 9:30 PM in the evening (21:36) and at this hour, the routine in most fire houses of the FDNY would have the members straightening up the kitchen after having finished the evening meal. That would be if their alarm calls for fire or emergencies were low. The members would then gather around discussing the topics of the day being current events or the experiences of recent fires or other notable calls from the public for assistance. As the evening would unfold 12 firefighters, husbands, fathers, brothers, and sons will have made the Supreme Sacrifice. Leaving behind 12 widows and 32 children with the memory of their farther having sacrificed their life for the citizens of New York City.



These are the members who while performing their duty to protect the life and property of the citizens of NYC were killed in the line of duty. May they RIP. Deputy Chief Thomas Reilly, Division 3 Firefighter William F. McCarron, Division 3, Aide to Chief Reilly

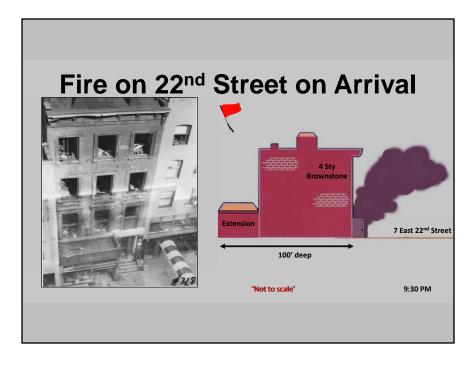
Battalion Chief Walter Higgins, Battalion 7

Lieutenant Joseph Prior, Engine 18 Firefighter Bernard A. Tepper, Engine 18 Firefighter James V. Galanaugh, Engine 18 Firefighter Joseph Kelly, Engine 18 Probationary FF Daniel L. Rey, Engine 18

Lieutenant Joseph Finley. Ladder 7 Firefighter Carl Lee, Ladder 7 Firefighter John G. Berry, Ladder 7 Firefighter Rudolph F. Kaminsky, Ladder 7



This is the intersection of 23rd Street and Broadway in NYC. You will note a portable ladder up to what is the building of the collapse at 6 East 23rd street. The fire had originated in the basement of a Brownstone type building on 22nd street and communicated into a section of the basement of 6 East 23rd Street. This would be below the occupancy of the Wonder Drug store.



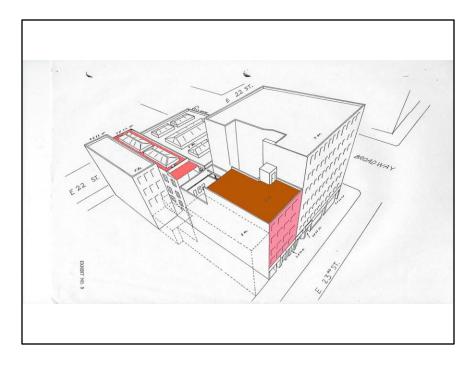
At 9:36 PM three Engines, two Ladder companies, one Battalion and one Deputy chief would be dispatched for a call to fire at the address 7 East 22nd Street. This was a 4 story Brownstone (Class 3, ordinary construction) type building with an art dealer studio occupying the basement, 1st, and 2nd floors. The 3rd floor was occupied by a Lamp company and the 4th floor was the residence of the Brown family. The fact that this family was home, and the wife alerted her husband of the smell of smoke this fire may have gone undetected for quite some time. The husband did not detect smoke in their apartment and proceeded down to the 3rd floor. Not sensing smoke, he exited onto the roof of a rear extension built onto the original Brownstone. Here he notice smoke issuing from a Skylight on the roof of this extension. Now he would return to alert the wife to call 911 and prepare the children with clothing to evacuate the building. The units dispatched to this initial call were Engines 14, 3, 16, and Ladders 3, 12, Battalion 6 including Division 3.

Upon arrival units would encounter extreme heat and thick smoke advancing a hand line (2 ½in/64mm) to the rear of the basement. An aerial ladder would be raised to the roof where members would accomplish vertical ventilation. The member(s) dispatched to the Roof assignment are expected to provide a visual survey of whatever exposures are presented to give a report. The fact that a rear extension two stories tall was constructed on the rear of this Brownstone is a significant detail to share with the Incident Commander and all Units Operating. This detail of information would be considered a **'Red Flag'** that everyone needs to consider in their 'size up', enhancement of situational awareness and evaluation of fire dynamics and spread.



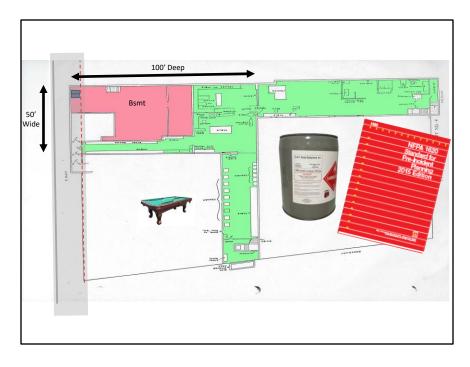
As fire operations would progress in 7 East 22nd street. The Deputy Chief would be advised that a fire alarm monitoring company, the Holmes Protective Company had received an alert at 9:46 PM and dispatched an employee to investigate the address at 6 East 23rd Street. Upon arriving and entering the first floor a light smoke condition was present. This information would represent another 'Red Flag' of critical information. The Deputy would assign the Chief of the 7th Battalion and members of Ladder 3 to proceed to that address. Encountering no progress in the building on 22nd street with the possibility of fire extension into a building on 23rd street a 2nd Alarm was struck. That would have Engines 1, 5, 18 and 33 respond. Engine 5 with a hose line accompanied by the members of Ladder 3 would proceed to the basement on 23rd street to navigate their way to a rear cinder block wall. They experience an odor that smelled like gas but no fire. They had no idea that this wall was only 65 feet deep into the occupancy. It was discovered after the tragic event that the Art Dealer from 22nd street breached the rear basement wall of the 23rd street building for the purpose of enlarging their workspace to manufacture picture frames that would be finished with volatile paints and lacquers.

A Deputy from Division 1 would assume Command on 23rd street. Engine 18 would be instructed to stretch a hose line into the 1st floor Wonder Drug store accompanied by members of Ladder 7. They stretched this line to the rear 100ft/30m into the store because smoke was issuing from the floor molding atop what was a 5in/127mm layer of Terrazzo flooring supported by ordinary lumber floor joists. That is a mixture of crushed marble, quartz, granite, glass chips poured with a cementitious binder. This floor did not offer any indication of heat from the fire raging and degrading the floor joist below.



This viewpoint displays the original fire building on 22nd street with the 5-story commercial building 6 East 23rd Street in the foreground. As fire operations were progressing it was not known just how long the fire had been burning in the basement of the Art Dealer which the seat of the fire was in fact below the rear of the Wonder Drug store with numerous members present on the first floor and basement areas.

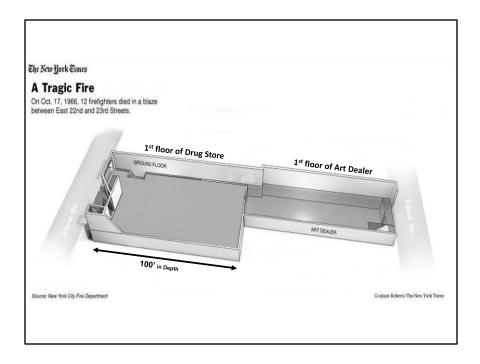
Those attack teams trying to advance onto the main body of fire from the 22nd street vantage point were not making progress to knock down a fire fueled with the heavy fuel base of wood used for framing, volatile paints, thinners, lacquers, and mineral spirts. The heat release rate and temperatures were extreme as was the smoke conditions.



This illustration displays what was the entire basement workspace for the Art Dealer whose entrance was on 22nd with numerous alterations and extension into other buildings on 23rd street and a building fronting Broadway. The entire space is highlighted in Green. The basement altered (shortened) of the Drug store is highlighted in Red. This large (green) area with the fuel base mentioned can account for the volume of fire and conditions being encountered. These alterations and hazards had not been identified through fire department visits that would provide an alert upon a call to respond to this address. Years later Standards would be established by the NFPA (Standard 1620) to require visits to gather Building Intelligence for the preparation of Pre-Incident Planning. Links for more information;

https://www.fdnypro.org/23rdstreet/

http://nyshfca.org/the-23rd-street-fire-october-17-1966/



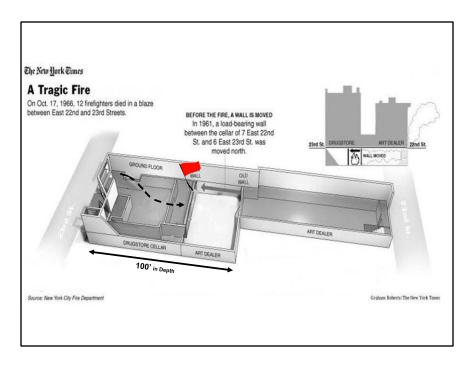
This is an artist depiction from the New York Times newspaper. It represents the firstfloor layout of both buildings that would not give evidence of these buildings being interconnected.

Also see: https://www.nytimes.com/2006/10/17/nyregion/17fire.html

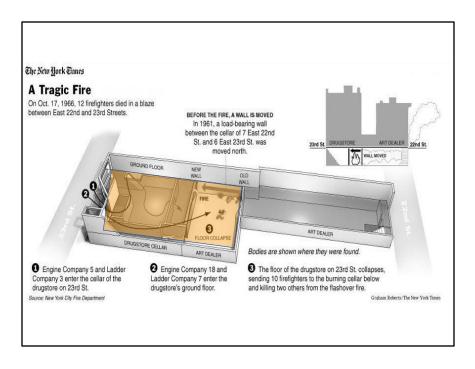
Terrazzo Floors



Those units entering the address 6 East 23rd Street should have noted the floor of the Wonder Drug store to be a poured in place Terrazzo flooring. This fact would also raise another **'Red Flag'** of pertinent information that creates a dangerous circumstance and question of structural stability in fire situations. This information should be communicated to the IC and all units operating in the building. This tragic event would reveal to the fire service that such a floor does not present evidence of heat from active fire below and depending upon a lack of compromise and openings the migration of smoke would also be hindered. This floor was installed in layers of planking supported by timber joists, with cement, tiles, and additional layer of Terrazzo above that. This would have added tremendous weight per square foot that would have exacerbated the time to failure as the timber joists were being degraded by heavy fire.



This illustration was also drawn by an artist of the New York Times shows the route that members of Ladder 3 and Engine 5 had taken to reach what was the rear wall of the basement of the Wonder Drug store. Because of the stored stock and limited width isles it obfuscated that fact that this space did not extend the full length $(100^{ft}/30^m)$ of the building. Had these members been able to determine that fact would have been another **'Red Flag'** of critical information to share with the IC and units operating in the building.



This illustration shows the position of Engine 18 with the members of Ladder 7 above the fire that had been raging below before the arrival of units on the initial alarm at 9:36 PM (21:36). The collapse occurred at approximately 10:39 PM (22:39), one hour and three minutes after the initial alarm. The supporting timber floor joists were of the dimensions measuring 3in by 14in spaced 16in on center. (76mm by 355 mm spaced 406 mm on center). Timber beams of this mass would withstand the direct exposure of fire for some time. Unlike the wood structural elements, the fire service encounters today with 2X4s used to construct truss work or what is referred to as 'Stick' construction.

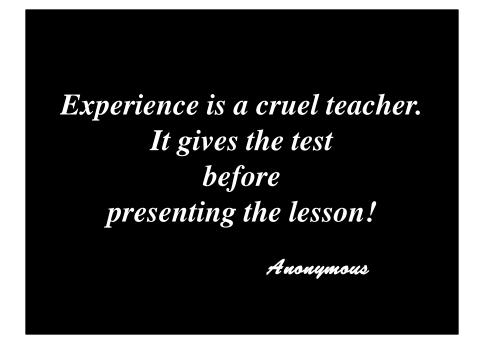
Also see the research conducted by UL on floor collapse.

https://ulfirefightersafety.org/research-projects/engineered-floor-systems.html



Just after the floor collapse and withdrawal of what members were still alive and able to escape the flames, other members made valiant attempts to re-enter the occupancy with hose lines. They would be thwarted by the volume of fire and heat venting from the entrance of the store. Thousands of firefighters, many off-duty would gather to assist in the search of rubble and burnt debris to remove our heroes with dignity. The fire commissioner at that time John T. O'Hagan would comment to the membership across the street in Madison Square Park "I know we all died a little in there".

If you read the reports and the published document from the Board of Inquiry one can deduce that there were many warning signs or **'Red Flags'** that may not have everted this event but are a lesson that details of vital information observed on the fire ground are worthy of sharing with Incident Commanders and all members operating. This will only enhance the 'Situational Awareness' for everyone, aiding decision making and altering actions and tactics when appropriate to do so.



Experience is a cruel teacher. It gives the test before presenting the lesson! Expressed by an Anonymous source.

"One learns more from experience than from books. The proverb has been traced back to 'The Schoolmaster' by Roger Ascham and comes from the L*tin phrase 'experiential docent 'meaning 'experience teaches.' Water Scott (1854-1900) disagrees with the proverb, saying that 'experience is the name everyone gives to their mistakes.'."