

Mysteries of the Twin Towers Rodger Herbst; BAAE, ME May 2004



Image Courtesy David McGowan: www.davesweb.cncost.com/nwsltr43.html

The collapse of 1 and 2 World Trade Center (the twin towers) transformed the attacks of September 11 2001 to a new level of horror and national rage. Information from a number of sources is brought together in the following paragraphs in an attempt to establish what actually happened.

The First Experts Suggested Explosives Were Used

The WTC towers did not collapse because of the airplane impacts alone, because both towers stood for approximately an hour or more after impact. On September 11, 2001, American explosives expert Van Romero said: "My opinion is, based on the videotapes, that after the airplanes hit the World Trade Center there were some explosive devices inside the buildings that caused the towers to collapse." [Albuquerque Journal, 9/11/01] On Sept. 12 , the Danish "Bomb expert" Mr. Bent Lund stated - "an estimated amount of circa 1 tons of Extra high-explosives Bombs must have been detonated inside the World Trade Center complex in order to make the Towers collapse in the manner they did." [Daily (Copenhagen) Newspaper "BT"]. Romero, who was seeking Pentagon research funding at the time of the attack, as well as Lund, soon changed their minds about the cause of the collapse, and politically correct revisionist theories soon blanketed the news media.

Politically Correct Revisionist Theories Fuel Doubts

The first Politically correct theory was that heat from the fires simply melted the structural core, causing the collapse. Yet even if support columns had melted due to burning jet fuel, it is highly unlikely that the resulting structural weakness would be completely symmetrical. Irregularity would have produced a collapse in which concrete and steel girders would have rained down over a wide area, causing additional damage and fatalities. Subsequent revisionist theories with various names thus all attempted to account for the complete symmetrical collapse in terms of weakening of the steel supports and some form of floor by floor chain reaction.

Fire Theory Henry Koffman, director of the Construction Engineering and Management Program at the University of Southern California wrote that intense heat from the fires melted the steel, which caused the collapse of the towers [<http://911research.wtc.net/talks/towers/explanations.html>]

Professor Thomas Eager is professor of Materials Engineering and Engineering Systems at MIT. The Minerals, Metals & Materials Society published his analysis, which concluded that the fire could not possibly have been hot enough to melt steel. The analysis, which notes that steel melts at 1500 deg C., and that jet fuel produces a maximum temperature of 1000 deg C., even when mixed in perfect proportions, parallels the historically verified fact that fire cannot melt steel. [See Eric Hufschmid, Painful Questions: An Analysis of the September 11th Attack Endpoint Software 2002] .

Steel Weakening By Heat

An article by Zdenek P. Bazant of Northwestern University and Yong Zhou appeared in the on-line version of *Journal of Engineering Mechanics ASCE*, with the first version dated 9/13/01 and revisions dated 9/22/01 and 9/28/01 purported to address **why the buildings Collapsed. Bazant and Zhou suppose that the steel in over half of the 287 columns of the crash zone was exposed to sustained temperatures exceeding 800°C. At such temperatures, structural steel exhibits significant viscoplastic deformation, which caused a buckling of columns.**

But how hot was the fire, and how much heat did it produce? Jim Hoffman notes that Corus Construction performed extensive tests subjecting uninsulated steel-frame carports to prolonged hydrocarbon-fueled fires. The highest recorded steel temperatures were 360 deg C. [<http://911research.wtc.net/talks/towers/explanations.html>] This is substantiated by Jim McMichael, who wrote that the maximum temperature achieved in fire testing of unprotected steel supports [in the U.K., Japan, the U.S. and Australia] was 360 degrees C (680 F), a long way from the first critical threshold in structural steel, 550 degrees C (1022 F). Heat from the Tower beams was continuously conducted from the heated portions to the cooler portions below, suggesting an even lower maximum temperature. ["Muslims Suspend Laws of Physics,"www.Public-Action.com/911/mcmichael.html]

Charles Clifton is a technical expert in determining the effects of severe fire and earthquake on steel framed buildings. He believed that fire could not possibly have caused the towers to collapse. [Painful Questions] He has noted that regions of fire at 700 deg C would be glowing red hot and visible from outside the building, and that significant window breakage would have occurred. He noted that neither of these conditions occurred in the towers [911strike.com]

Investigative journalist David McGowan notes The Discovery Channel documentary entitled "Collapse: How the Towers Fell" was in many ways misleading. However, the analysis it provided also argues against structural elements reaching high temperatures. It noted that jet fuel, which can burn at temperatures "approaching 2000 deg F." does not burn for very long. "According to the show's experts, fully one-half of [Flight 11's] fuel burned outside of the tower. The remaining half, which ignited inside the tower, burned up in about eight minutes. And that analysis was based on the first crash, into the north tower. As can be clearly seen in video footage, a much higher percentage of the fuel burned outside the South Tower, in the second crash (9:03 am), yet the South Tower fell first (9:59 am) [www.davesweb.cnchost.com/nwsltr43.html]

On Aug. 2, discovery of a "lost" audiotape was reported. This tape is important, because it established that firefighters actually reached the crash zone on the 78th floor of the south tower, and confirms that the crash zone was not a raging inferno, and that the firefighters apparently believed they were in control of the situation. [http://americanfreepress.net/08_09_02/New_York_Firefighters_/new_york_firefighters_.html]

The appearance of several people in the fracture caused by the airplane entry in the North Tower also suggests temperatures were not excessive in the crash zone. [Hufschmid Painful Questions p. 27]

"Fire has never caused a steel building to collapse," writes Eric Hufschmid, quoting Bill Manning of Fire Engineering; "So how did a 56-minute fire bring down a steel building as strong as the South Tower? ... The Meridian Plaza fire in Philadelphia was extreme, but it did not cause the building to collapse. The [fires in the Towers] seem insignificant by comparison".

Truss Theory

Fire Engineering Magazine concluded that a growing number of fire protection engineers have theorized that "the structural damage from the planes and the explosive ignition of jet fuel in themselves were not enough to bring down the towers." These Fire Engineering specialists adopted the notion of a failure of lightweight trusses connecting building perimeter to load-bearing central columns. [New York Daily News, 1/4/02 , Fire Engineering, 1/02] In other words, the failure was lateral rather than vertical.

Although the building's plans were not initially available for investigation, photos of tower construction show that lateral steel floor beams anchored the perimeter to the central columns, enabling the capability to take large lateral loading due to wind. [www.nerdcities.com/guardian/WTC/wtc-demolition.htm]

The towers were designed to survive impact with a 707 commercial aircraft and ensuing fires due to burning fuel. The 707 is comparable in size to the 767 aircraft that struck the towers. The towers were also designed to withstand lateral winds of over of 140 miles per hour.

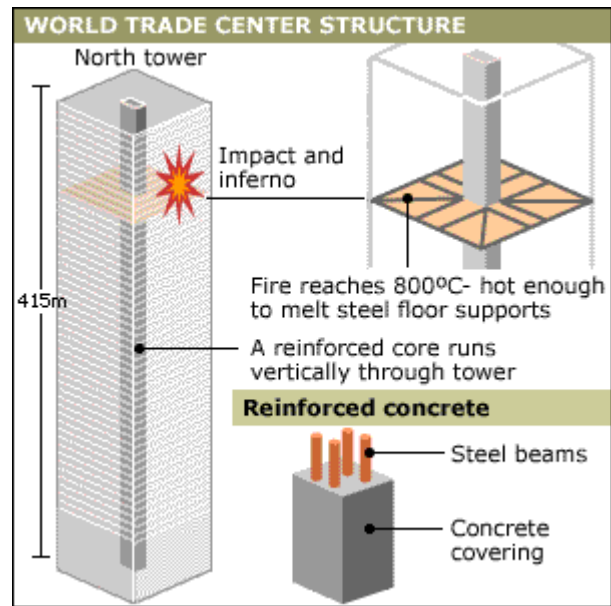
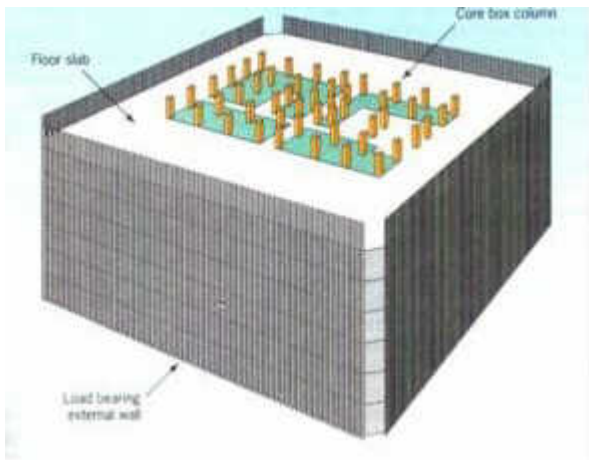


South Tower Impact Courtesy www.serendipity.li
www.serendipity.li/wot/impact2.htm

Pancake Theory

According to Bazant and Zhou, the “chain reaction” resulting in complete floor by floor symmetrical collapse of the North Tower was caused by the acceleration of the mass of the building above the buckled columns downward.

The term “Pancake Theory“, (as well as its variants; Zipper or Domino), arose to help facilitate the credibility of the chain reaction theory. Here the tower floors are likened to weak “pancakes.” David McGowan notes the discrepancy between the standard media graphic portraying the tower structure, and an accurately scaled rendering of the 'footprint' of one of the towers (image on left.)



Images Courtesy David McGowan: www.davesweb.cnchost.com/nwsltr43.html

The structural core occupied a significant portion of each tower's footprint. The floors are not wide-open 'pancakes,' as depicted in graphics distributed by the media (image on the right).

McGowan notes: “the 'pancake theory,' at best, only offers an explanation how the floor and exterior wall sections may have possibly collapsed. Even if such an unlikely event had occurred, the end result would not have been a 60-foot-high mound of rubble, but rather two somewhat narrower, 110-story towers.” [www.davesweb.cnchost.com/nwsltr43.html]

Any chain reaction theory would have to accommodate the fact that each of the towers unraveled completely in less than 15 seconds, which is close to the time of free fall from the top of the buildings if there had been no intervening solid structure. How could a mechanical process proceed through 100 floors with such speed?

A British Perspective

In an article dated 4 October 2001, Professor Wilem Frischmann, of the Pell Frischmann Group and the City University, London, said that the aircraft puncturing of the outer steel shells of the towers would not in itself have caused the towers to fall. Although the explosion caused by the fuel-laden aircraft would have been intense, the lack of available oxygen inside the towers would, according to Professor

Frischmann, have limited the fireball's temperature to less than 1,000 Celsius, within the tower design limits. Architect Bob Halvorson, of Halvorson and Kaye in London said: "There is going to be a debate about whether or not the World Trade Center Towers should have collapsed in the way that they did.... We are operating well beyond realistic experience." [news.bbc.co.uk/1/hi/sci/tech/1579092.stm]

The FEMA Building Performance Assessment

The Federal Emergency Management Agency (FEMA), and the American Society of Civil Engineers (ASCE) assembled a group of volunteer investigators, which was called the Building Performance Assessment Team (BPAT), and supplied \$600,000 in funding. The BPA Team consisted of specialists in tall building design, steel and connection technology, fire and blast engineering, and structural analysis.

On May 1, 2002: FEMA released its report of the WTC collapses, based on the conclusions of that group. The second paragraph of the Executive Summary notes "The structural damage sustained by each tower from the impact, combined with the ensuing fires, resulted in the total collapse of each building". According to the Executive Summary, the team "conducted field observations at the WTC site and steel salvage yards, removed and tested samples of the collapsed structures, viewed hundreds of hours of video and thousands of still photographs, conducted interviews with witnesses and persons involved in the design, construction, and maintenance of each of the affected buildings, reviewed construction documents, and conducted preliminary analyses of the damage to the WTC towers.

Yet the report then concludes "With the information and time available, the sequence of events leading to collapse of each tower could not be definitely determined." [www.house.gov/science/hot/wtc/wtc-report/wtc_Ex_Sm.pdf].

The document continues to waffle as it acknowledges the inability of the heat of burning jet fuel to explain the collapse: "The heat produced by this burning jet fuel does not by itself appear to have been sufficient to cause structural collapse. However, as the burning jet fuel spread across several floors of the building, it ignited much of the buildings' contents (paper, carpet, furniture????) causing simultaneous fires across several floors of both buildings.... Over a period of many minutes, this heat induced additional stresses into the damaged structural frames while simultaneously softening and weakening these frames. This additional loading and the resulting damage were sufficient to induce collapse of both structures."

The report insults the integrity of the original design of the towers, stating "Events of this type, resulting in such substantial damage, are generally not considered in building design, and the ability of these structures to successfully withstand such damage is noteworthy." It also suggests design features such as the type of steel truss floor were responsible, while cautioning us to not think of these design features as deficiencies.

Deepest mystery makes Appendix C

A tiny fraction of the steel beams from the tower debris were inspected. A New York Times article [February 2002] noted that pieces of steel were found that were "apparently melted and vaporized not solely because of the heat of fires, but also because of a corrosive contaminant that was somehow released in the conflagrations." Recommendations in Appendix C of the FEMA WTC report noted: "The severe corrosion and subsequent erosion of samples 1 and 2 constitute an unusual event. No clear explanation for the source of the sulfur has been identified." Materials science professors Ronald R. Biederman and Richard D. Sisson Jr. confirmed the presence of eutectic formations by examining steel samples under optical and scanning electron microscopes. A preliminary report was published in JOM, the journal of the Minerals, Metals & Materials Society. A more detailed analysis comprises Appendix

C of the FEMA report. The New York Times called these findings "perhaps the deepest mystery uncovered in the investigation."

A eutectic compound is a mixture of two or more substances that melts at the lowest temperature of any mixture of its components. Blacksmiths took advantage of this property by welding over fires of sulfur-rich charcoal, which lowers the melting point of iron. In the World Trade Center fire, the presence of oxygen, sulfur and heat caused iron oxide and iron sulfide to form at the surface of structural steel members. This liquid slag corroded through intergranular channels into the body of the metal, causing severe erosion and a loss of structural integrity. The important questions, says Biederman, are how much sulfur do you need, and where did it come from? Did the eutectic mixture form before the buildings collapsed, or later, as the remains smoldered on the ground. 'We have no idea,' admits Sisson. [<http://www.wpi.edu/News/Transformations/2002Spring/steel.html>]

Reaction to the FEMA Assessment

On December 25, 2001 The New York Times reported that some of the nation's leading structural engineers and fire-safety experts believe the investigation into the collapse of the WTC was inadequate, and are calling for a new, independent and better-financed inquiry. Experts critical of the investigation included some who actually took part in it. The team of 20 or so investigators, who conducted their review between October 7-12, had no subpoena power, inadequate financial and staff support, and had been prevented from interviewing witnesses and frequently prevented from examining the disaster site, and had even been unable to obtain basic information such as detailed blueprints of the buildings. [New York Times, 12/25/01] The NY Times account of the team activities contrasts with the account provided in the FEMA Report Executive Summary..

The decision of the City of new York to rapidly recycle the 300,000 tons of steel columns, beams and trusses from the WTC in the days immediately after 9/11 adversely effected the inquiry. Curiously, no forensic examination of the debris was permitted by the "Agency in charge", the FBI.

On January 4, 2002, the Fire Engineering trade magazine, with ties to the New York Fire Department, called the investigation into the collapse of the WTC a "half-baked farce." The article pointed out that the probe has not looked at all aspects of the disaster and has had limited access to documents and other evidence. Bill Manning, editor of the magazine, noting that destruction of evidence is illegal, demanded that the destruction and removal of the steel columns must stop immediately.

Congressman Boehlert, Chairman of the Science Committee of the House of representatives, testified "I must say that the current investigation- some would argue that 'review' is the more appropriate word- seems to be shrouded in excessive secrecy" and "...valuable evidence has been lost irretrievably, and blueprints were unavailable for months."

Professor Glenn P. Corbett, John Jay College of Criminal Justice testified before the Science Committee of the House of Representatives on March 6: "...we are staffing the [investigation] with part-time engineers and scientists on a shoestring budget." [Painful Questions, 2]. Corbett further noted "The steel holds the primary key to understanding the chronology of events and causal factors resulting in the collapse," and recommended an investigative commission on the World Trade Center Disaster

The Science committee itself, in its March 6 2002 report, called for a broader WTC investigation. In a letter to Mr. Mitchell E. Daniels, Jr. Director, Office of Management and Budget, the committee wrote "There was unanimity among the witnesses on the need for a comprehensive assessment and research agenda to address evacuation procedures, emergency response, and structural analysis of the site's buildings." [cryptome.org/wtc-hearing.htm]

Even the New York Times has expressed dismay. On the first anniversary of the attacks, The Times wrote, "the public knows less about the circumstances of 2,801 deaths at the foot of Manhattan in broad daylight than people in 1912 knew within weeks about the Titanic, which sank in the middle of an ocean in the dead of night." [NYT 7/23/02] The situation has not changed significantly.

Explosives Reconsidered

The first experts consulted suggested explosives were used to bring down the towers. Eric Hufschmid, J. M. King, and others have noted that the explosives theory explains very well the apparent removal of all structural support from the lower floors, and the neat demolition like collapse of the towers. [members.aol.com/erichuf/; home.attbi.com/~JMKing; www.serendipity.li/WTC.html]

Senior Special Agent in Charge (Retired) Ted L. Gunderson noted in *An Open Letter to U.S. Attorney General John Ashcroft* "Regarding 9-11 ... I have photographs available proving that the towers were imploded. These photographs are from NBC News' live television video footage (30 frames per second, with each frame numbered and broken down) the morning of September 11, 2001. They are available upon your request. [http://www.patriotamerica.com/TedGunderson/Reports.htm]

The mainstream media generally did not report explosions. Reports continue to surface however, and there is now photographic and even video evidence available which suggest that explosions actually did occur within the Twin Towers prior to their collapse.

Reporting of Explosives

According to Scott Forbes, a senior database administrator for Fiduciary Trust, Inc., with offices in the former WTC, Fiduciary employees trapped between the 90-97th floors of the South Tower told family members (via cell-phone calls) that they were hearing "bomb-like explosions" throughout the towers. Forbes, who had helped prepare the South Tower for an unusual power outage the weekend before 9-11 [discussed under **WTC Security** below] had the day off, and saw the towers collapse on TV.

Kim White, 32, an employee on the 80th floor, reported hearing an explosion. "All of a sudden the building shook, then it started to sway. We didn't know what was going on ... We got down as far as the 74th floor ... then there was another explosion." [www.serendipity.li/wtc.html#evidence_for_explosives]

Teresa Veliz, who escaped from the 47th floor of the North Tower: noted : "The flashlight led us into Borders bookstore, up an escalator and out to Church Street. There were explosions going off everywhere. I was convinced that there were bombs planted all over the place and someone was sitting at a control panel pushing detonator buttons. I was afraid to go down Church Street toward Broadway, but I had to do it. I ended up on Vesey Street. There was another explosion. And another. I didn't know where to run." [September 11: An Oral History, Dean E. Murphy, 2002, pp. 9-15]

On Sept. 11 the British Broadcasting Corp. (BBC) interviewed one of its New York-based reporters, Steve Evans: "I was at the base of the second tower ...that was hit," Evans said. "There was an explosion-I didn't think it was an explosion-but the base of the building shook. I felt it shake . . . then when we were outside, the second explosion happened and then there was a series of explosions. . . . We can only wonder at the kind of damage-the kind of human damage-which was caused by those explosions-those series of explosions," he said.

[http://americanfreepress.net/08_09_02/New_York_Firefighters_/new_york_firefighters_.html]

On September 12, 2001, NY News Day reported that officials had recently taken steps to secure the towers against aerial attacks by installing bulletproof windows and fireproof doors in the 22nd-floor

computer command center. "When the fire started, the room was sealed," said [Hermina] Jones, who was in the command center when explosions rocked the building. "Flames were shooting off the walls...We started putting wet towels under the doors. The Fire Department unsealed the door and grabbed us by the hand and said, 'Run!' " [<http://www.nynewsday.com/news/local/manhattan/wtc/ny-nyaler122362178sep12,0,7280472,print.story>]

On March 11 2002, CBS aired a film consisting largely of documentary footage on the firefighters of the FDNY's Engine 7, Ladder 1, all of whom survived the collapse of the towers. The footage was taken by a team of two French brothers, Jules and Gedeon Naudet. To their surprise, the firefighters of engine 7 found widespread damage to the entire lobby area. Over and over, these professional firefighters expressed their complete puzzlement over the damage in this area. As one firefighter put it: As one put it: "The lobby looked like the plane hit the lobby!" Although the narrator claimed that fire officials were "informed... by certain federal officials" that the lobby damage occurred because "burning jet fuel" had poured eighty stories down the elevator shafts and then exploded in the lobby, there was no indication of an incendiary-type explosion or fire in this area. <http://www.thepowerhour.com/postings/911-oddities-revealed.htm> Reference at indymedia website: http://sdimc.org/webcast/front.php3?article_id=912

This event is paralleled by an account given by Peter Wong, who was right under the elevator lobby of WTC 1 between the two ID checkpoints. "I heard the sound of broken glass, smelled burning gas [what kind of gas??], a door blown off about twenty feet in front of me, heat was coming my way. I stepped back and hid myself at the middle elevator of the Blue Cross/Blue Shield section when the strongest wave of explosion passed by with chunks of glass and debris flying around." (09/11 8:48 am: Documenting America's Greatest Tragedy 2001 BookSurg.cam and BlueEar.com.)

Reports of explosions by members of the NYC Fire Department also appear in the American media. In the September 12, 2001 issue of People, Louie Cacchioli tells of his rescue work inside the WTC: "On the last trip up a bomb went off. We think there was bombs set in the building." [People, 9/12/01]In an NBC exclusive: 911 Tapes Tell Horror Of 9/11 (Part 2) June 17, 2002 "Tapes Released For First Time", the quoted dialog references explosions: "Official: Battalion 3 to dispatch, we've just had another explosion. Official: Battalion 3 to dispatch, we've had additional explosion. Dispatcher: Received battalion command. Additional explosion. " [www.wnbc.com/news/1315651/detail.html]

Senior Special Agent in Charge (Retired) Ted L. Gunderson noted in *An Open Letter to U.S. Attorney General John Ashcroft* "Regarding 9-11, I have been told by a credible source that New York City firemen on the 76TH and 84TH floors radioed their commanders and reported that bombs were going off prior to the collapse of the World Trade Center towers. [<http://www.patriotamerica.com/TedGunderson/Reports.htm>]

Photographic, Seismic, video, Fox 5 News, and Technical Data Suggest Explosives

The first event in the collapse of each building was a mushroom cloud of dust above the building.

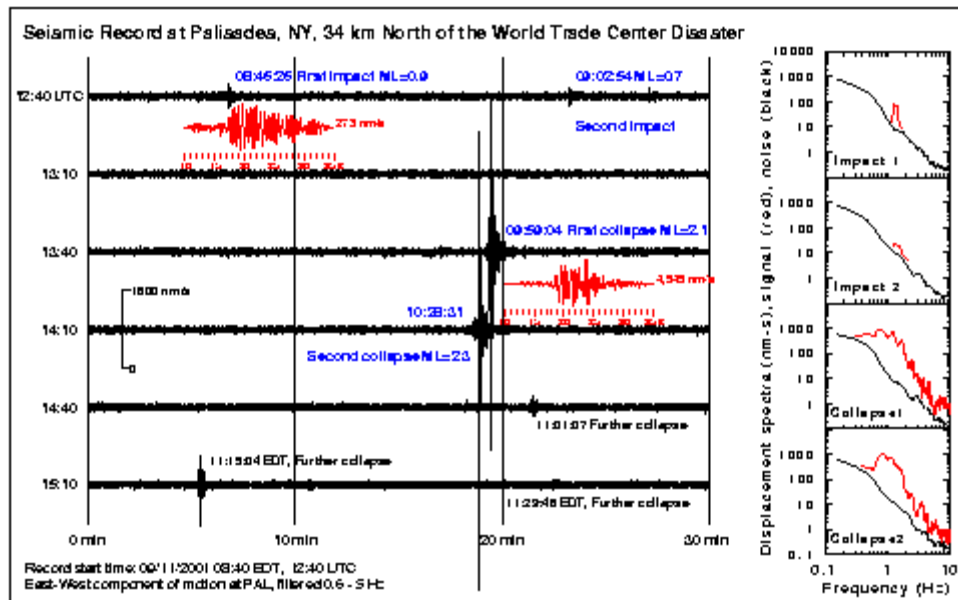
Hufshmid's book shows frames from a video looking up at the South Tower. The frames show the collapse "progressing floor by floor in a nearly perfectly balanced manner". After ribbons of dust blow out of the windows of one floor, they grow into larger dust clouds; meanwhile ribbons of dust blow out of the windows of the next lower floor, and so on.

It has also been noted that the explosions of dust from the windows that span the east face of the tower can equally well be explained as being caused by air being forced from the windows as each of the floors above collapsed. However, Jim Hoffman has calculated the energy required to allow the observed volume of expansion of dust, and found that it exceeds the energy available from gravitational collapse by a factor of 15. [<http://911research.wtc.net/talks/towers/explanations.html>]



Collapse of South Tower Photo 1 and Photo 2 Courtesy www.serendipity.li
www.serendipity.li/wot/collapse.htm

Detailed photos show debris, as well as the dust of pulverized concrete being ejected horizontally at high velocities up to several times the width of the towers during the collapse. According to Hufschmid, and Jim Hoffman, concrete is only pulverized in mid air in this manner by explosives. Danish video expert Henrik Melvang claims his four hour video shows five distinct "DUST CLOUDS" from Demolition Bombs exploding far below the point of airplane impact within the WTC.



Seismic Activity During 9-11 Courtesy www.serendipity.li www.serendipity.li/wtc5.htm

Data was recorded by Seismographs at Columbia University's Lamont-Doherty Earth Observatory in Palisades, New York, 21 miles north of the WTC.

Using the equation $\text{SQRT}\{(distance * 2)/G\} = (Time)$, it takes about 9 seconds for an object to fall from the top of the towers (1300ft) to the ground. Hufschmid notes that the collapse times noted in the Seismic report; 8-10 seconds matches the collapse time derived from video images. This means that if these times are correct, all underlying structure was removed, allowing essentially free fall of the entire structures. Alternatively, Jim Hoffman has estimated it took rubble from the towers' tops about 13-16 seconds to reach the ground, both inside and outside the towers' footprints.

According to American Free Press, while the aircraft crashes caused minimal earth shaking, significant earthquakes with unusual spikes occurred at the beginning of each collapse. The Palisades seismic data recorded a 2.1 magnitude earthquake during the 10-second collapse of the South Tower at 9:59:04 and a 2.3 quake during the 8-second collapse of the North Tower at 10:28:31. Experts apparently cannot explain why the seismic waves peaked before the towers hit the ground. Asked about these spikes seismologist Arthur Lerner-Lam, director of Columbia University's Center for Hazards and Risk Research told AFP, "This is an element of current research and discussion. It is still being investigated." [www.serendipity.li/wot/bollyn2.htm: American Free Press]

Interestingly, the seismic activity at 9:59:04 may be compared with a September 11 2001 Fox 5 News video: A few seconds after 10:00 am, former Colonel Donn De Grand Pre notes, "we see a great white cloud of smoke and dust rising from the base of the [South] tower. The anchor gal exclaims, 'There is an explosion at the base of the building... white smoke from the bottom... something happened at the base of the building... then, another explosion! Another building in the WTC complex ...'" [Barbarians Inside the Gates: Book Two: The Viper's Venom: p 50]

A close up of the Seismic data for the North Tower [Hufschmid Painul Questions pg 73] shows a period of increasing activity, including sharp spikes at 1, 2 and 3 seconds, leading to the 2.3 magnitude pulse at about 5 seconds, followed by a period of decreasing activity. It has already been established that the

collapse began at the top of the towers, and that it took at least 8-10 seconds for the collapsing material to reach ground. This means that the sharp spikes during the first 5 seconds occurred before the collapsing material could reach the ground.

The concept of seismic activity prior to collapsed material reaching the ground is supported by the commentary of Conor O'Clery, who stated on seeing the south tower collapse: "I shifted my eyes upwards to the first tower that had been hit and was still standing, and saw that several more people had appeared in the upper stories where they had smashed windows. The man with the white cloth was still there, hanging precariously by one hand with his body out over the abyss. I wondered why there was no attempt to rescue them by helicopter as part of the roof of the 1350-foot building was clear of smoke. But then the tower began to sway slightly and two people fell in quick succession from the windows as if unable to maintain their grip....Then the [building collapsed]" [09/11 8:48 am: Documenting America's Greatest Tragedy 2001 BookSurg.cam and BlueEar.com.]

The Earth Institute News, posted 11/16/01, carried an article entitled *Damage to Buildings Near World Trade Center Towers Caused by Falling Debris and Air Pressure Wave, Not by Ground Shaking, Columbia Seismologists Report in November 20 issue of Eos*. The article states "While the ground shaking was consistent with the energy released by small earthquakes, it was not sufficient to cause the collapse of or damage to the surrounding buildings, as some have thought. Rather, the buildings around the Twin Towers were impacted both by the kinetic energy of falling debris and by the pressure exerted on the buildings by a dust- and particle- laden **blast** produced by the collapse.[www.serendipity.li/wot/bollyn2.htm: American Free Press]

Aftermath Suggests Explosives

On September 8 2002 Colonel John O'Dowd, of the U.S. Army Corps of Engineers, appeared on The History Channel. O'Dowd, who is no stranger to disaster scenes, had never seen anything like the remains of the twin towers. "At the World Trade Center sites," he said, "it seemed like everything was pulverized." There was nothing recognizable in the debris -- nothing to indicate that that pulverized debris had been, just seconds earlier, a functioning 10,000,000-square-foot office building. O'Dowd had been present at the scene of the partially collapsed Oklahoma City federal building. Though the collapse of the Murrah building was definitely facilitated by one or more powerful explosive charges, the debris from that collapse was not pulverized to the degree that it was at the site of the WTC towers. . [www.davesweb.cnchost.com/nwsltr43.html]

According to an Associate Press article of 1/15/02, Dr. Charles Hirsch, chief medical examiner of the City of New York, triggered an angry response when he told grieving relatives that many bodies had been "vaporized." The goal of his office was to identify at least 2000 of the 2823 victims. Dr. Michael Baden, the state's chief forensic pathologist said that most bodies should be identifiable because the fires ... did not reach the 3,200-degree, 30-minute level necessary to incinerate a body. Dr. Cyril Wecht, a top forensic pathologist in Pittsburgh said the combination of fire and compression from tons of rubble could reduce a human body to a small amount of tissue and bone.

[http://www.fdiai.org/some_world_trade_center_victims_.htm]

After one year, Hirsch's office had identified 1,401 victims, including 45 of those aboard the hijacked planes - 33 from Flight 11, which struck the north tower, and 12 from Flight 175, which hit the south tower.

[<<http://www.nydailynews.com/news/local/story/17949p-17009c.html>>]

After the Oklahoma City bombing, all 168 people killed were eventually identified. And the towers, according to the official story, were acted upon by nothing more than the effects of fire and gravity.

Five days after the collapse, on September 16, the National Aeronautics and Space Administration (NASA) used an Airborne Visible/Infrared Imaging Spectrometer (AVIRIS) to collect thermal data at the WTC site. The data revealed a number of surface thermal hot spots in the region of collapse. Analysis of the data indicated temperatures greater than 800 oF in these hot spots (some over 1300 oF). - U. S. Geological Survey Report <greenwood.cr.usgs.gov/pub/open-file-reports/ofr-01-0429/index.html>

Controlled Demolition Incorporated, the company selected to remove the rubble from the bombing of the Murray building in Oklahoma City, was also selected to cleanup rubble from the WTC. According to Mark Loizeaux, president of CDI of Phoenix, Maryland, "pools of molten steel were found" ... "at the bottoms of the elevator shafts of the main towers, down seven [basement] levels, .. "three, four, and five weeks later, when the rubble was being removed" As has been noted, construction steel has an extremely high melting point of about 2,800° Fahrenheit (1535° Celsius). [www.serendipity.li/wot/bollyn2.htm: American Free Press] Accounts vary as to the duration the steel was in molten form. The key question is how does a small amount of jet fuel at the top of the towers, with a maximum temperature of 1000 deg C, result in molten steel at 1500 deg C. in the basement?

CDI advertises its ability to demolish steel columns into pieces matching the lifting capacity of available equipment. Interestingly much of the WCT steel rubble could be stacked conveniently on standard flatbed trailers. [Hufschmid]

Suppression of Reports of Explosives ?

According to the New York Times, New York City Mayor Bloomberg failed to conduct an investigation into the WTC attack response, yet the City of New York has continued to hold hundreds of documents and audio tapes recording the response of emergency services to the September 11 attacks on the WTC, which it says should never be released to the general public. [NYT 7/23/02]

In response to a petition by the NY Times, which has been trying to get copies of these materials, New York State Supreme Court Justice Richard Braun ruled in February 2003 that the city had not provided sufficient reason for withholding these documents. The City of NY initially appealed this ruling. [AP February 6 2003] A "compromise" was apparently reached: In the final ruling, portions of the oral histories and tapes containing the opinions and recommendations of the interviewees and dispatchers will be redacted, "since such opinions and recommendations are to be distinguished from factual material." Apparently New York City does not trust the opinions of those it entrusted with the safety of its citizens. The press will get only expressions of personal feelings. On November 20 2003, the federal commission investigating the Sept. 11 terrorist attacks announced that four months after its initial request for the materials, it had issued a subpoena . [NYT 11/21/03]. After strenuously objecting, the City of New York finally relented, with the agreement that redacted versions of the tapes could be made, but the originals must remain in the custody of New York City.

Interestingly, access to the original "lost" audiotape of firefighters on the 78th floor, referenced earlier, was severely restricted by the Justice Department. The relatives of the 16 firefighters whose voices were identified on the tape were allowed to hear their last words, but were first required to sign a statement prepared by lawyers that they would not disclose what was said on the tape. [http://americanfreepress.net/08_09_02/New_York_Firefighters_/new_york_firefighters_.html]

The decision to allow "redacted" versions to be released could be appealed to the New York Court of Appeals, but the New York Times has not indicated any plan to appeal. [http://www.courts.state.ny.us/reporter/3dseries/2004/2004_00091.htm]

The Collapse of WTC #7

WTC7 has received a lot of attention because of its inexplicable collapse at 5:20 PM on September 11. WTC7 purportedly burned for hours before collapsing, but the source of the fire remains a mystery, as does the complete failure of the building's modern fire-protection systems.

Another interesting fact is that the entire twenty-third floor of WTC7 was a state-of-the-art command center, reportedly set up by Mayor Giuliani. That floor was designed to serve as a base of operations during times of crisis. It was reinforced to withstand winds of 160 miles per hour, and had an independent air and water supply.

On September 11, 2001, the command center was monitoring the situation in lower Manhattan -- until personnel there received an order to evacuate. One official told the filmmakers: "to this day, we don't know who gave that order." [www.davesweb.cncost.com/nwsltr43.html]

In a PBS documentary "America Rebuilds" Larry Silverstein admitted that WTC 7 was "pulled," that is, intentionally demolished: "I remember getting a call from the, er, fire department commander, telling me that they were not sure they were gonna be able to contain the fire, and I said, 'We've had such terrible loss of life, maybe the smartest thing to do is pull it. And they made that decision to pull and we watched the building collapse.'" [<http://www.pbs.org/americarebuilds/>]

This explanation undermines the FEMA assessment: "The specifics of the fires in WTC 7 and how they caused the building to collapse remain unknown at this time."

The Silverstein "Study"

Only three months before the attack, Silverstein Properties and Westfield America signed a rental contract for the WTC, agreeing to pay a total of 3.2 billion Dollars in leasing installments over 99 years to the Port Authorities [Die Welt, Berlin, Oct 11, 2001] According to The Financial Times Ltd., terms of the lease allowed the new owners to walk away from their investment in the event of "an act of terrorism." [www.interesting-people.org/archives/interesting-people/200109/msg00162.html] Despite not being the owner of the buildings, Silverstein demanded to be the sole beneficiary of the insurance indemnity payments of more than 7 billion Dollars. Steve Solomon, his spokesman said. ... The Port Authorities agreed with Silverstein's demand." –[Die Welt, Berlin, Oct 10, 2001.]

Interestingly, a team of engineers from several firms working for Silverstein Properties Inc. offered their own high tech analysis of the cause of collapse, based on the notion of column failure, not floor trusses. Two WTC, though hit by the second hijacked plane after One WTC, fell first "primarily" because the plane struck it at an off-center angle and caused damage that compromised the corner of the core of the building, concludes the report's authors, the New York City-based leaseholder of the World Trade Center. [mcgraw construction] The study fails to mention that researchers have noted that corner of the building virtually disappeared, or rather disintegrated, in a cloud of smoke. [Hufschmid, Hoffman, McGowan]

WTC Security

According to a September 12 2001 report by NY News Day, a WTC security detail had been working 12-hour shifts prior to 9-11 because of numerous phone threats. But on the Thursday before, "bomb-sniffing dogs were abruptly removed". [<http://www.nynewsday.com/news/local/manhattan/wtc/ny-nyaler122362178sep12,0,7280472,print.story>] Several internet sources reference the unfortunate demise of the bomb sniffing dog Sirius who was allegedly killed when the towers collapsed. [http://www.dogspeak.ca/WTC_Dogs.htm] Interestingly, one of the sources claims Sirius' ashes were recovered from the trade center wreckage, and placed in an urn for his Port Authority police officer master David Lim. [<http://www.signal8-2.com/paula.htm>] [www.signal8-2](http://www.signal8-2.com) is sponsored by Port

Authority of NY and NJ Police.

Victor Thorn of Wing TV has reported the WTC 9-11 security concerns of Scott Forbes, a senior database administrator for Fiduciary Trust, Inc., with offices in the former WTC. His company was notified three weeks in advance that New York's Port Authority would take out power in the South Tower from the 48th floor up on the weekend prior to 9-11, ostensibly to implement a computer cabling upgrade. Forbes noted that Fiduciary Trust was one of the WTC's first occupants after it was erected, and that a "power-down" had never been initiated prior to this occasion. Forbes recalled the power was out approximately 30 hours between early Saturday morning (September 8th) and mid-Sunday afternoon (September 9th). As a result of the power outage, the WTC's security cameras, ID systems, and elevators to the upper floors were rendered inoperative. Forbes noted that many "engineers" going in-and-out of the WTC had free access throughout the building due to its inoperative security system. Forbes also noted other security related anomalies: Video cameras positioned atop the World Trade Center which were used to feed daily images to local television stations were inexplicably inoperative that morning. Also, a Fiduciary employee who was on one of the lower floors and escaped immediately after the first (North) tower was struck, reported that he was amazed by the large number of FBI agents that were already on the streets surrounding the WTC complex only minutes after the initial strike. Forbes says that even though these disclosures could jeopardize his current employment, he has stepped forward because, "I have mailed this information to many people, including the 9/11 Commission, but no one seems to be registering these facts." [<http://69.28.73.17/thornarticles/powerdown.html>] Did a similar power outage occur in the North Tower?

Ontrack/Convar, the German company that was trying to recover data from WTC hard drives in order to determine who was responsible for last minute financial transactions on 9/11, was purchased after the fact by none other than Kroll Inc. (Kroll O'gara Eisenhardt) in June 2002. Kroll is a huge, multi-national security firm which has strong ties to US intelligence. Coincidentally, one of their upper echelon, Jerome Hauer, was responsible for brokering the position of head of security for ex-FBI whistleblower John O'Neill in the WTC. Mr. O'Neill died in the 9/11 attacks. [<http://www.rumormillnews.com/cgi-bin/forum.cgi?noframes;read=45822>]

A business entity now known as Stratesec, Inc. began performing security work at the Center in 1993. In 1996, Stratesec, then known as Securacom, was awarded an exclusive contract to provide security for the World Trade Center complex. Stratesec/Securacom also provided security for United Airlines and Dulles International Airport. Sitting on Stratesec's board of directors, from the time the company began working at the WTC, was a major shareholder by the name of Marvin Bush. Marvin, like Jeb and Neil, is a brother of George W. Bush. [www.davesweb.cncost.com/nwsltr43.html]

Gathering the Loose Ends

Building professionals were unsatisfied with the original building assessment and have recommended an investigative commission into the WTC collapses. The Science Committee of the House of Representatives itself called for a broader WTC investigation. A number of new issues could be addressed:

How could any mechanical process (causing a floor by floor chain reaction collapse) proceed through 100 floors with enough speed to roughly coincide in time to building free fall?

Numerous instances are documented of the reporting of explosives by people immediately present, who lived to tell of their experiences. These reported explosions, however, were prior to the collapses. What was the source of these prior explosions? One possibility might be disrupted utilities, such as natural gas mains or electrical circuits. But why were there so many, so far below airplane impact?

What caused the seismic events occurring prior and during the collapse of the buildings, but before any debris hit the ground, as witnessed by both bystanders and seismic instrumentation? How does a small amount of jet fuel at the top of the towers, with a maximum temperature of 1000 deg C., but probably much lower, result in molten steel at 1500 deg C. in the WTC basement?

Why would the City of New York label reports of emergency responders "opinions" as untrue, across the board, and refuse to release these opinions to the public? What are these "opinions" NY City wants to keep hidden? Why were the relatives of 16 firefighters identified on the "lost" tape be required to sign a statement of non-disclosure before being allowed to hear it?

Where did the sulfur come from in the eutectic mixture that allowed the steel to melt at lower temperature than usual?

Some evidence still survives. Dr. W. Gene Corley, who headed the FEMA-sponsored engineering assessment of the WTC collapse, noted that 80 pieces of steel were saved.

[www.serendipity.li/wot/bollyn2.htm: American Free Press] Dr. Abolhassan Astaneh-Asl Professor Department of Civil and Environmental Engineering University of California, Berkeley testified "I have identified and saved some components of the structures that appear to have been subjected to intense fire or impact of fast moving objects. " [cryptome.org/wtc-hearing.htm]

www.serendipity.li/WTC.html notes that steel which is subjected to explosion exhibits a characteristic which metallurgists call "twinning". Presumably the surviving fragments of the supporting steel columns of the Twin Towers could still be tested for twinning.

Thanks to Eric Hufschmid, Dave McGowan, and the webmaster of serendipity.li for permission to reproduce images.