

A Critical Review of the “9/11 Mysteries Viewer’s Guide”

By Adam Taylor

Version 1.0

Introduction:

The film 9/11 Mysteries Part 1: Demolitions was one of the first professionally made independent films regarding alternative theories surrounding the events of September 11th, 2001.[1] In particular, the film focused on the numerous anomalies concerning the collapse of the WTC. The film was praised by numerous members of the so-called 9/11 Truth Movement:

**"Excellent. The best of the 9/11 movies."
-- David Ray Griffin**

**"WOW! is my reaction to this movie. Great insight into demolitions and what really happened on 9/11/2001."
-- Steven E. Jones**

**"An outstanding contribution to understanding 9/11. Simply superb."
-- James H. Fetzer**

Regardless of this praise, many have also criticized the film based on allegations that the film presents false information, illogical fallacies, and cherry-picked sources. The most extensive criticism has been developed by a person named “Shane,” calling himself “The Doc” on the internet.[2] The Doc’s first criticism came in the form of a film called “Screw 9/11 Mysteries,” a version of the original film subtitled with comments by The Doc.[3] Over two and half hours in length, this edited version of 9/11 Mysteries critiqued practically every point of the film. Soon after, The Doc also developed a written essay titled “9/11 Mysteries Viewer’s Guide.”[4] This essay expanded on the points made in Screw 9/11 Mysteries, and is over 130 pages in length. The essay was made to refute the entire film, using the film’s online transcript.[5]

It should be noted that 9/11 Mysteries has also been criticized by other members of the Truth Movement as well.[6] The most extensive critique of the film by a proponent of the controlled demolition theory was done by software engineer Jim Hoffman.[7] I myself strongly disagree with several points the film makes. However, for as many errors I have found in 9/11 Mysteries, I have found greater errors in the Viewer's Guide of the film.

My purpose in writing this is to show that the criticisms made in the 9/11 Mysteries Guide do not refute the theories of controlled demolition of the World Trade Center. Rather, the Guide makes numerous mistakes itself in attempting to give what it calls the "truth." This review is not a complete critique of the Guide, as there are several elements of 9/11 Mysteries that the Guide does correctly debunk. As such, I will not extensively discuss or discuss at all certain topics that the Guide addresses that I also feel are either false or too debatable, such as:

- Claims about pyroclastic flows.[8]
- Claims about basement explosions.[9]
- Claims about pre-impact explosions.[10]
- Claims about insurance for the WTC.[11]
- Claims about the "slurry walls."[12]
- Claims about a "power down."[13]
- Claims about the WTC security (although I will discuss possible means of covertly working in the buildings).[14]

Again, many of these and other issues are addressed in Jim Hoffman's critique.

Also, I will not spend time addressing what I consider to be simple nit-picking in the Guide, such as claims about Brad's sleep exaggerations.[15]

What I mainly want to deal with is the forensic scientific evidence that points to controlled demolition of the Twin Towers and Building 7. The science alone should decide if the buildings were brought down with explosives. Although I will address elements of this, the speculative politics of the matter should really be secondary.

Finally, please fact-check everything in this critique to see if what I've written holds up to scrutiny. I am completely open to criticism.[16]

(Excerpts from the Guide will be shown in **purple**. Excerpts from the film will be shown in **blue**.)

The Myth

The Guide's first real critique of elements of the controlled demolition theory begins with the criticism of the film's claim of steel melting.

1:54 On September 11th, we learned that four passenger planes were hijacked and taken radically off course. Within an hour, two of the planes had flown into the enormous steel towers of the World Trade Center, creating fires and eventually toppling them.

2:20 Dazed by the news, the American public soon believed the fires in the towers had burned so hot they caused the steel frames of the buildings to give way.

2:38 A myth developed, fed by official sources through the media to a bewildered audience. Elements of the myth: the impact of the airplanes, gallons of burning jet fuel, **steel melting**, the buildings failing and suddenly imploding. In a mere 10 seconds, 110 stories hurtled earthward -- **pulverizing into dust**.

According to the Guide, this is a straw man argument in the film.

The official story never mentions steel melting. This is what is known as a straw man argument: http://en.wikipedia.org/wiki/Straw_man

"A straw man argument is a logical fallacy based on misrepresentation of an opponent's position. To "set up a straw man" or "set up a straw-man argument" is to create a position that is easy to refute, then attribute that position to the opponent."

Many others have also claimed this to be a straw man argument presented by the film, as the official story does not say that steel melted in the Towers. However, as the film indicates, this was simply the initial assumption made by not only the public, but also by several experts.[17]

"Structural steel is fireproofed to last between one and two hours, which it did, and then **steel melts**." -Hyman Brown, project engineer for the construction of the Twin Towers.

"The columns would have **melted**, the floors would have **melted** and eventually they would have collapsed one on top of each other." -Chris Wise, structural engineer

"The 35 tonnes of aviation fuel will have **melted** the steel." -John Knapton, professor of structural engineering at the University of Newcastle

"I believe that the intense heat softened or **melted** the structural elements--floor trusses and columns--so that they became like chewing gum, and that was enough to trigger the collapse."
-Eduardo Kausel, M.I.T. professor of civil and environmental engineering quoted a month after the attacks.

It was in fact several experts in the fields of structural engineering who were the first to make claims of "steel melting." Regardless, the Guide still claims this to be an error made by the film and presents a quote from NIST's FAQ on the WTC.[18]

This is what the NIST report FAQ has to say about melting steel.

In no instance did NIST report that steel in the WTC towers *melted* due to the fires. The melting point of steel is about 1,500 degrees Celsius (2,800 degrees Fahrenheit). Normal building fires and hydrocarbon (e.g., jet fuel) fires generate temperatures up to about 1,100 degrees Celsius (2,000 degrees Fahrenheit). NIST reported maximum upper layer air temperatures of about 1,000 degrees Celsius (1,800 degrees Fahrenheit) in the WTC towers (for example, see NCSTAR 1, Figure 6-36).

Here is what 911research.wtc7.net had to say in response to this:

Confusion about whether the official story depends on the melting of structural steel is a product of [pronouncements from a number of experts](#) that the fires in the Twin Towers caused their collapses by melting steel. Subsequently, attackers of challenges to the official story used the argument that the fires couldn't have melted steel as a [straw man argument](#). [19]

The Guide then goes onto to discuss the film's claim of the buildings being pulverized.

This is demonstrably false. The following is a dust sample taken from Ground Zero.
<http://www.janegalt.net/blog/archives/004194.html>

Microscopic analysis of WTC dust by Nicholas Petraco, BS, MS, DABC, FAAFS, FNYMS at The New York Microscopic Society lecture held at AMNH 28 May 2003

- 45.1% Fiberglass, rock wool (insulation, fireproofing)
- 31.8% Plaster (gypsum), concrete products (calcium sulfate, selenite, muscodite)
- 7.1% Charred wood and debris
- 2.1% Paper fibers
- 2.1% Mica flakes
- 2.0% Ceiling tiles (fiberglass component)
- 2.0% Synthetic fibers
- 1.4% Glass fragments
- 1.3% Human remains

1.4% Natural fibers
trace asbestos (it became illegal to use during the construction of the WTC)

Other trace elements: aluminum, paint pigments, blood, hair, glass wool with resin, and prescription drugs were found.

If the towers had indeed “pulverized”, the above dust sample would contain high amounts of steel particles. Although some elements of the towers did pulverize, we can see that they are mostly comprised of fragile products such as insulation and fireproofing.

Here, the guide seems to confuse the film’s statement that the entire buildings themselves would have had to have been pulverized. The film does not state this, although it could have been worded better. Much of the buildings’ non-metallic components were pulverized. Not the steel.[20]

Regardless, even though steel particles were absent, an enormous amount of iron particles were discovered[21], which ties into the next part of the Guide’s critique.

Something more important that we can take from this dust analysis is the absence of explosive products. If the towers were brought down in a controlled demolition of any sort, we would expect to see traces of nitro-glycerin and TNT.

This would only be true if conventional explosives were used to demolish the buildings. However, as indicated by the presence of the iron spheres, it is more likely that some form of aluminothermic incendiary was used. More on this will be discussed later.

3:35 The myth bled into the FEMA report ... and was **echoed by the experts.**

This would include (but is not limited to):

<http://wtc.nist.gov/pi/>

Shyam Sunder
William Grosshandler
H.S. Lew
Richard Bukowski
Fahim Sadek
Frank Gayle (MSEL)
Richard Gann
John Gross
Therese McAllister
Jason Averill
Randy Lawson
Harold E. Nelson
Stephen Cauffman
Valentine Junker
Vincent Dunn
John Hodgins
Kevin Malley

Debunking911.com also has a good list, which can be found here:

<http://www.debunking911.com/paper.htm>

That is a lot of **experts** (on the debunking911 page) who agree with the official story. Perhaps 9/11 Mysteries should have considered why the experts echoed the official story.

Here the Guide makes an obvious appeal to authority to indicate that the majority of experts agree with the official story. However, there are countless experts in the fields of building construction and engineering who disagree with the official story,[22] and many of them have written technical articles on the collapse of the Towers.[23]

Plane Impacts

The Guide next moves on to examine the film's claim the Towers should have been able survive the airplane impacts.

3:55 John Skilling and Les E. Robertson were the structural engineers who designed the streamlined steel frames of the Twin Towers in the 1960s. Because a wayward army bomber flew into the Empire State Building in 1945, the towers were **built with skyscraper crashes in mind.**

We feel that it is necessary to point out that Les E. Robertson does not disagree with the official story. In fact, Les Robertson has even gone to the extent of debating 9/11 conspiracy theorist, Steven Jones. You can listen to the audio of this debate at the link below.

http://www.911podcasts.com/files/audio/StevenJones_LeslieRobertson_20061026.mp3

A very comprehensive analyzation has been done of this debate.[24]

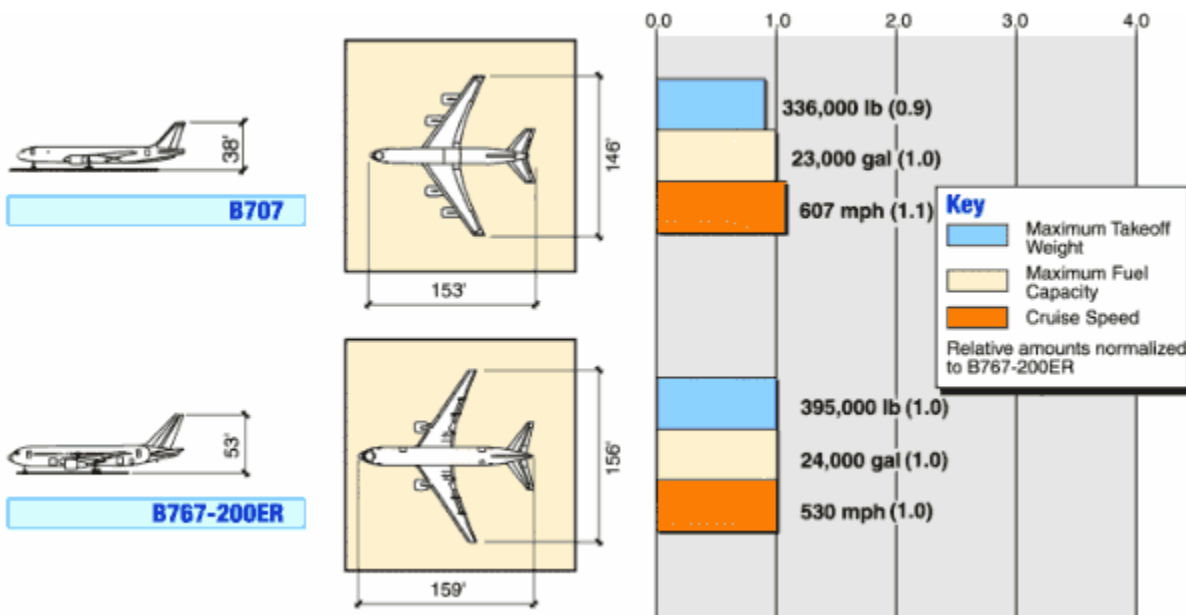
9/11 Mysteries does make an effort to point out that the plane the buildings were built to withstand was a 707, and not a 767. However, they seem to miss why this is significant.

4:36 Official Story narrator "But the aircraft that hit the towers was a Boeing 767, heavier than a 707, **fueled for a transcontinental flight** and traveling fast."

4:48 707s and 767s are comparable. The maximum take-off weight of a fully loaded 707 is almost 334,000 pounds. As airplanes only carry the fuel load they need, **the smaller-model 767s that struck the towers were not, in actuality, maximally fueled** OR close to their maximum take-off weight.

For starters, 707s and 767s are only comparable in some aspects. The 767, however, is 20% larger than the 707.

Here is a diagram which scales the relative size and structure of the two planes.



This shows the size of the two planes relative to a Tower's footprint.

NIST states this in their FAQ:

http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

"The damage from the impact of a Boeing 767 aircraft (**which is about 20 percent bigger than a Boeing 707**) into each tower is well documented in NCSTAR 1-2. The massive damage was caused by the large mass of the aircraft, their high speed and momentum, which severed the relatively light steel of the exterior columns on the impact floors. "

The response from 911research:

NIST's first answer reeks of propaganda: the "massive damage caused by the large mass" of the plane is contrasted with the "light steel" of the building. In fact, the steel on a single floor of the tower weighed ten times as much as a 767.**[25]**

9/11 Mysteries tells us that the 767s that struck the World Trade Center buildings were a "smaller model" airplane. This is not true.

<http://www.airliners.net/info/stats.main?id=87>

707: Wingspan of 145ft, Length of 152ft, Height of 42ft

<http://flyaow.com/planes/767aircraftspecifications.htm>

767: Wingspan of 156ft, Length of 159ft, Height of 52ft

Therefore, we know that a 767 is, in actuality, larger than the 707. But what about speed?

The modeled aircraft weighed 263,000 lb (119 metric tons) with a flight speed of 180 mph (290 km/h), as in approach and landing. This was much slower than the actual impacts of 9/11, which were 490 mph and 550 mph respectively. As energy increases with the square of speed, the 767s that hit the towers had a kinetic energy more than seven times greater than the modeled impact.

More information on the modeled airplane can be found at:

http://www.fema.gov/pdf/library/fema403_ch1.pdf

First of all, the speeds that the Guide references—490 and 590 mph—come from the FEMA report. However, the NIST estimates are 440 and 540 mph.

Second, the FEMA report merely claims that a speed of 180 mph was taken into consideration, but provides no source for this particular piece of information. The report also goes on to say that:

Including aircraft impact as a design load requires selecting a design aircraft, as well as its **speed**, weight, fuel, and angle and elevation impact.[26]

It seems unlikely that the original designers would have only envisioned a slow speed strike if the plane's cruising speed needed to be accounted for. And the Port Authority agrees on this point.

There has been some recent speculation that the modeled plane impact was actually 600mph as opposed to 180mph. This is what the NIST report had to say about this issue.

<http://wtc.nist.gov>

“A Port Authority document indicated that the impact of a Boeing 707 aircraft flying at 600 mph was analyzed during the design stage of the WTC towers. However, the investigators were unable to locate any documentation of the criteria and method used in the impact analysis and were thus unable to verify the assertion that “...such collision would result in only local damage which could not cause collapse or substantial damage to the building and would not endanger the lives and safety of occupants not in the immediate area of impact.”

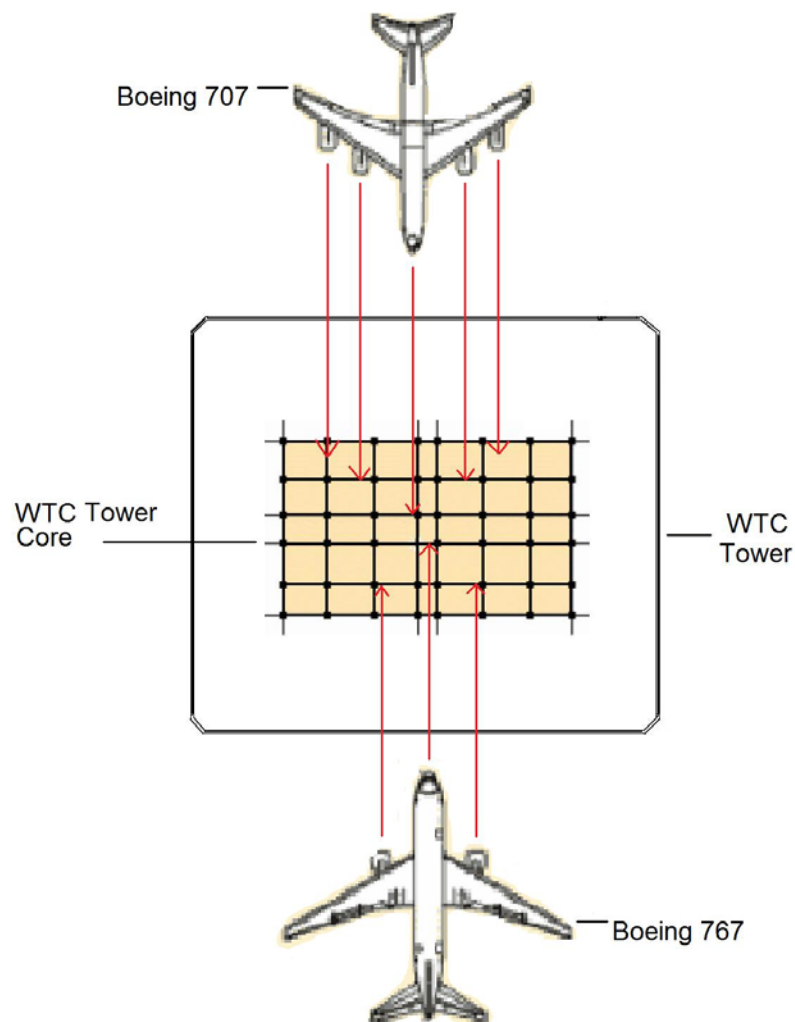
There is no documentation explaining the results. Furthermore, NIST also said this about the 600mph figure:

http://wtc.nist.gov/NFPA_Presentation_on_WTC.pdf

“NIST found no documentary evidence
of any analysis supporting this conclusion.”

Regardless, there is a clear indication that a faster flying plane was considered in the design. Has NIST brought forward documentation showing the speed was actually 180 mph as opposed to 600 mph?

It is worth noting that, although a 767 is larger, that does not necessarily mean it would have done more damage to a Tower than a 707. Some have argued that the wider wingspan of a 767 would have allowed the plane to slice through more columns. However, this would only have been true of the perimeter columns. The wings a 707 would likely have cut through more core columns in a Tower than the wings of a 767. Why? A 707 has four engines, as opposed to a 767, which only has two. The most solid part of an airplane is undoubtedly the engines. A plane equipped with four steel and titanium engines would more than likely have done more damage than a plane with only two.



There are other indications that the design strength of the Towers was even stronger. From 911research:

On February 13, 1965, real estate baron Lawrence Wien called reporters to his office to charge that the design of the Twin Towers was structurally unsound. Many suspected that his allegation was motivated by a desire to derail the planned World Trade Center skyscrapers to protect the value of his extensive holdings, which included the Empire State Building. In response to the charge, Richard Roth, partner at Emery Roth & Sons, the architectural firm that was designing the Twin Towers, fired back with a three-page telegram containing the following details.

THE STRUCTURAL ANALYSIS CARRIED OUT BY THE FIRM OF WORTHINGTON, SKILLING, HELLE & JACKSON IS THE MOST COMPLETE AND DETAILED OF ANY EVER MADE FOR ANY BUILDING STRUCTURE. THE PRELIMINARY CALCULATIONS ALONE COVER 1,200 PAGES AND INVOLVE OVER 100 DETAILED DRAWINGS.

...

4. BECAUSE OF ITS CONFIGURATION, WHICH IS ESSENTIALLY THAT OF A STEEL BEAM 209' DEEP, THE TOWERS ARE ACTUALLY FAR LESS DARING STRUCTURALLY THAN A CONVENTIONAL BUILDING SUCH AS THE EMPIRE STATE BUILDING WHERE THE SPINE OR BRACED AREA OF THE BUILDING IS FAR SMALLER IN RELATION TO ITS HEIGHT.

...

5. THE BUILDING AS DESIGNED IS SIXTEEN TIMES STIFFER THAN A CONVENTIONAL STRUCTURE. THE DESIGN CONCEPT IS SO SOUND THAT THE STRUCTURAL ENGINEER HAS BEEN ABLE TO BE ULTRA-CONSERVATIVE IN HIS DESIGN WITHOUT ADVERSELY AFFECTING THE ECONOMICS OF THE STRUCTURE.

...

At the time the Twin Towers were built, the design approach of moving the support columns to the perimeter and the core, thereby creating large expanses of unobstructed floor space, was relatively new, and unique for a skyscraper. However, that approach is commonplace in contemporary skyscrapers.[27]

One thing that must be made clear is that John Skilling was the head structural engineer for the WTC, not Leslie Robertson.[28] Several claims made by Robertson post-9/11 directly contradict pre-9/11 claims made by John Skilling.

“With the 707, to the best of my knowledge, **the fuel load was not considered in the design.** Indeed, I don't know how it **could** have been considered.” Leslie Robertson post-9/11

However, according the head WTC structural engineer:

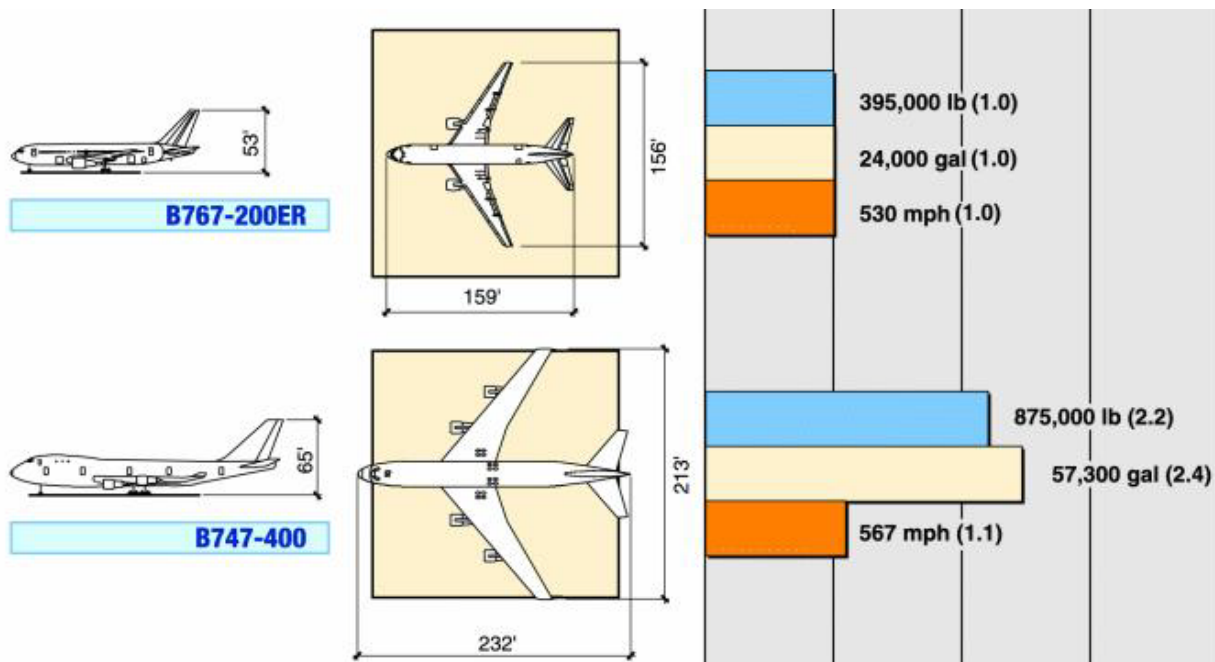
“Our analysis indicated the biggest problem would be the fact that all the fuel (from the airplane) would dump into the building. There would be a horrendous fire [but] the building structure would still be there.” John Skilling, WTC Lead Structural Engineer.

Why would Robertson clearly contradict the word of his obvious superior? This is not meant to imply that Robertson is lying, but it is certainly easier to claim that something “could” or could not happen after the fact. This is quite evident from the pre and post 9/11 comments made by structural engineer Charlie Thornton about the WTC.

Pre-9/11:

Charlie Thornton: “13,000 tonnes is a lot of force. People always talk about an airplane crashing into a building. And in 1944 or 45 a plane did crash into the Empire State Building. But the largest aircraft flying today, at least commercially, the **747, fully loaded**, is on the order of 300 tonnes. So if you think about a 300 ton element crashing into a building that’s been designed to carry 13,000 tonnes you can see that **an aircraft crashing into the World Trade Center would probably not do anything to the major building.** It could affect localized structural elements, could knock out a column, and there could be some damage. **But as far as plane knocking a building over of that type, that would not happen.”**

A 747 happens to be much larger than a 767.



Charlie Thornton firmly believed pre-9/11 that the Towers would have survived an impact from this type of plane. Now listen to his comments post-9/11:

Charlie Thornton: “But in fact, in plain English, the buildings were a **piece of shit... They were horrible. They were horrible buildings...** They designed a building that was **cheap, flimsy,** and essentially a **piece of crap.**[29]

The evidence is very strong that the plane impacts were well within the design parameters of the WTC buildings.[30]

We can observe another straw man argument in this section of the film when the narrator, Sofia, states that the 767s that hit the towers “were not, in actuality, maximally fuelled”. She does this despite the fact that the person who represents the official story, who spoke just before her, says that the planes were “fuelled for transcontinental flight”.

How does she get “maximally fueled” out of that? In fact, the official story states that the planes had approximately 10,000 gallons of fuel on board.

http://www.9-11commission.gov/report/911Report_Exec.htm

“An airliner traveling at hundreds of miles per hour and carrying some 10,000 gallons of jet fuel plowed into the North Tower of the World Trade Center in Lower Manhattan.”

We also know that a 767’s maximum fuel load is close to 24,000 gallons.

http://www.boeing.com/commercial/767family/pf/pf_200prod.html

No one ever said the 767s were maximally fuelled.

However, as John Skilling’s comment made clear, the jet fuel of the plane was taken into account when the Towers were designed.

5:13 As for the heat of the fires, listen to the radio communications of these New York City firemen:

5:20 Firefighter: “Ladder One-Five, we’ve got two isolated pockets of fire. We should be able to knock it down with two lines. Radio that, 78th floor -- we’ve got two isolated pockets of fire...”

5:32 **Isolated pockets of fire. “Two water lines” to knock them down.**

What 9/11 Mysteries has failed to do here is distinguish between the fires on the 78th floor, and the fires in the rest of the building.

This heroic firefighter, Orio J. Palmer, was undoubtedly correct in saying that there were only two isolated pockets of fire on the 78th floor. This actually fits with the NIST WTC Fire Recreation report. As we can see, there are only two isolated pockets of fire on the 78th floor.

Image - > http://www.911myths.com/assets/images/db_images/db_Floor781.jpg

Now let's look at some other floors. Such as the 82nd and 83rd floors of Tower 2 (the tower Palmer was in).

Image -> http://www.911myths.com/assets/images/db_images/db_Floor821.jpg

Image -> http://www.911myths.com/assets/images/db_images/db_Floor831.jpg

9/11 Mysteries implies that **all of** the fires could have been taken down with two lines and were, therefore, not as large as we are led to believe. That would be taking Mr Palmer's quote out of context. He said it would take two lines to knock down the pockets of fire on the 78th floor. As we can see, much more would have been needed for the higher floors of the impact zone.

To assume that the bulk of the fires was located on the lowest section of the impact point is just ignorant.

This first thing that we can note here is that the images the Guide presents are not actual pictures of any fires in the South Tower. They are computer simulations from the NIST report. While it is true that the 78th floor would probably have had less fire than the other floors (being that floor 78 was the lowest point where the plane impacted), is it fair to say that the fires were more severe on the upper floors based off of NIST's simulations? More on this will be discussed later.

5:38 FEMA's Executive Summary relays that much of the fuel in the planes (jet-grade kerosene) was consumed by the initial fireballs and the following few minutes of fire.

5:51 It then tells us that the burning jet fuel spread between floors and ignited the buildings' contents, causing more fire and generating heat. This was somehow enough to bring down the towers' 47-column steel core, 236 exterior columns and thousands of steel trusses **all at the same time.**

"All at the same time"? That would imply that the core fell at the same speed as the rest of the building and that every floor collapsed at the same time. This, clearly, was not the case.

Image -> http://images.911mysteriesguide.com/themyth_01.jpg

Image -> http://images.911mysteriesguide.com/themyth_02.jpg

Image -> http://images.911mysteriesguide.com/themyth_03.jpg

Video -> <http://www.youtube.com/watch?v=o4u9i62bMXQ>

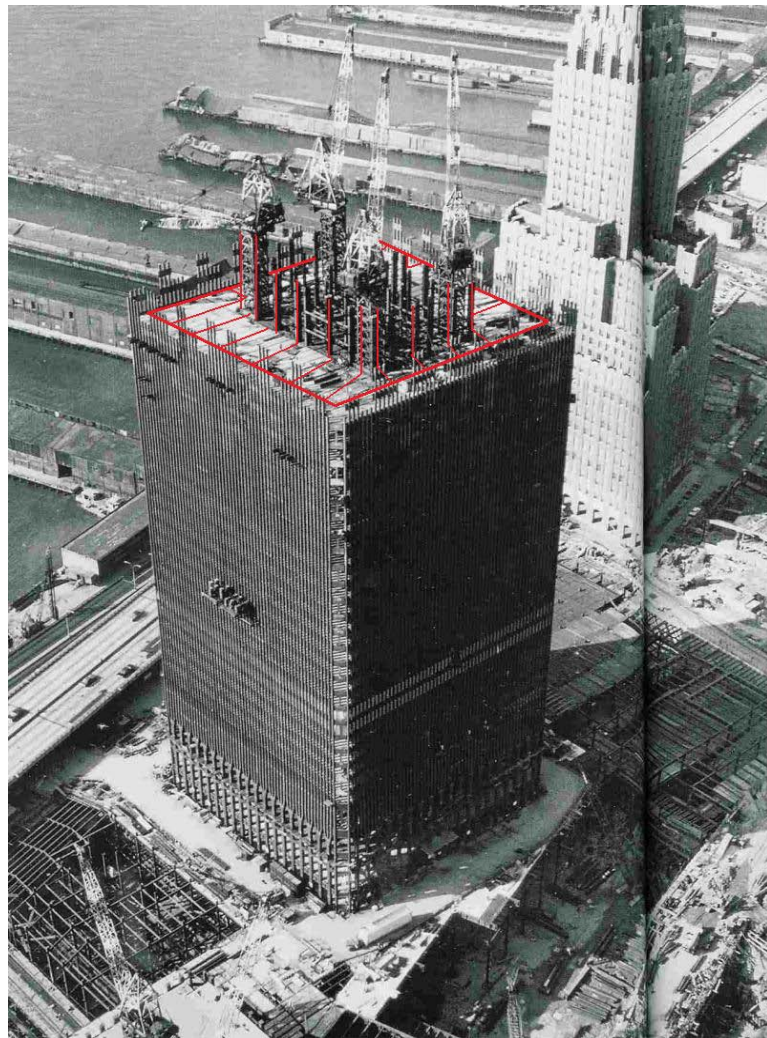
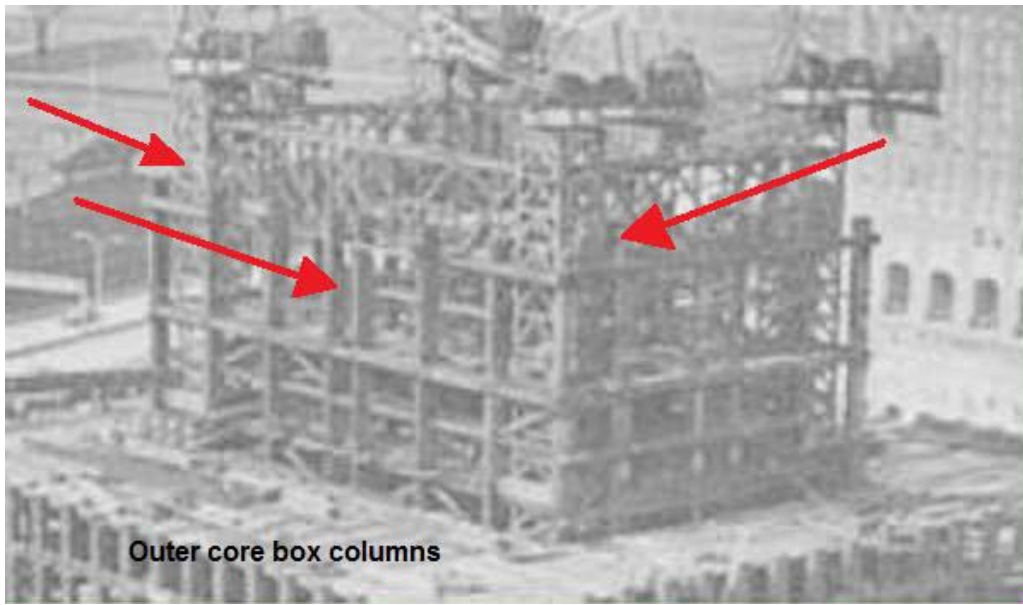
Video -> <http://www.youtube.com/watch?v=4n8xgwHBLYY>

It is obvious that the core took at least 15 seconds longer than the rest of the tower to fall. Therefore, using this analysis, we can conclude that the 47-column steel core, the 236 exterior columns and the thousands of steel trusses did not fall “all at the same time”.

Here we have an example of the Guide making a claim that is technically true, but fails to see the bigger picture. While the entire core of the South Tower did not fail, quite a bit of it did. But how much? This photo taken by Aman Zafar shows the clearest view of the South Tower’s core before it collapsed.

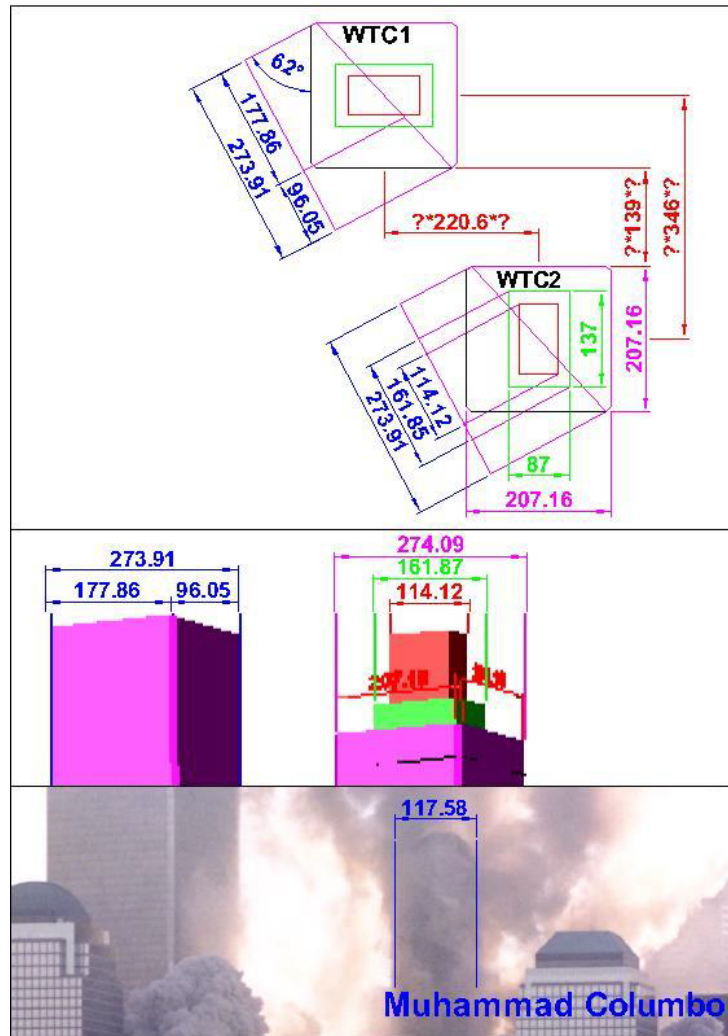


Indeed, a large portion of the core does seem to have survived the collapse. The Guide and many others feel that the existence of the core invalidates the theory that explosives were used to destroy the Towers, as demolitions generally take out a building’s entire core structure. However, analyzations done by Muhammad Columbo and Gordon Ross reveal that this is in fact not the entire core.[31] The core of each Tower was made up of 23 inner columns and 24 stronger outer columns. The 24 outer core columns were structurally significant because they made up the outer rectangular perimeter of the core, and were therefore the columns that the floors were directly connected to.



[32]

The photo by Aman Zafar shows that the remaining portion of the South Tower's core was too narrow to be the whole core, and was in fact the inner 23 core columns. The outer 24 columns are evidently missing.



If one were going to demolish the Towers, the outer core columns would need to be removed in order to cause the floors to collapse as well.

So, while it is true that the perimeter, core, and trusses did not fail “all at the same time,” the key supports that would have needed to be removed did collapse all at the same time. Therefore the Guide’s claim, while technically true, is irrelevant and does not refute the controlled demolition hypothesis.

6:15 Watch the towers smoking in the aftermath of the plane strikes.

6:20 If you have ever tried to light a **wood fire**, you will know that smoking logs tell you the fire is NOT burning successfully. **Smoke is the sign of an oxygen-starved fire.** The Twin Towers

stood for over an hour, smoldering but not flaming. During that time, thousands of people were evacuated by way of the stairwells.

At the outset, I would like to point out that the World Trade Center fires were not a 'wood fire'. The reason as to why 9/11 Mysteries compares them to a wood fire is beyond us. We thought that we should clear that up for anyone who is may be unaware of that fact.

There is no rule that says "black smoke = oxygen starved fire". Sure, in some cases (such as a wood fire) this may be the case. However, in the World Trade Center, there was far more than wood burning. There were plastic products (computers), paper, carpet, desks, jet fuel and other items that you would expect to see in an office building, and they were all burning. The equation that 9/11 Mysteries presents to us is highly simplistic and fails to take into account what was actually be burning in the towers.

Take, for example, this quote from a Health and Safety paper.

http://www.hse.gov.uk/research/hsl_pdf/2004/hsl0414.pdf

"Large fires involving plastics produce copious quantities of black smoke, such smoke is likely to be more toxic than smoke from a fire involving wood, and would render escape and fire fighting very difficult."

Furthermore, an experienced Fire Investigator John J Lentini tells us that smoke color means absolutely nothing.

<http://www.atslab.com/fire/PDF/IndicatorsOfTrouble.pdf>

"While it is true that flammable liquids produce black smoke, so does any petroleum-based product. The color of the initial flame and smoke might have been important in the 1940s and 1950s when our furniture was made of cotton and wood, but most furniture today is made of nylon, polyester, and polyurethane. Even wood fires, deprived of oxygen, will produce black smoke. According to NFPA 921, Paragraph 3.6:

"Smoke color is not necessarily an indicator of what is burning. While wood smoke from a well ventilated or fuel controlled wood fire is light colored or gray, the same fuel under low-oxygen conditions, or ventilation-controlled conditions in a post-flashover fire can be quite dark or black. Black smoke can also be produced by the burning of other materials including most plastics or ignitable liquids."

Light smoke may indicate that there are no petroleum products burning. Black smoke indicates nothing meaningful."

So, there you have it: smoke color means nothing. In fact, the heat of the fire itself can also determine the smoke color.

<http://www.slate.com/id/2145891/>

"The type of fuel and how hot it's burning. In general, a hotter fire will convert more fuel into elemental carbon, which forms into tiny particles that absorb light and appear in the sky as black smoke."

Again, there is no scientific law that “black smoke = oxygen starved fire”. This also applies to “lots of smoke = oxygen starved fire”. Here are some open-air fires that show black smoke in oxygen rich environments.

Image -> <http://www.911myths.com/assets/images/BlackSmoke1.jpg>

Image -> <http://www.911myths.com/assets/images/BlackSmoke2.jpg>

Here the Guide presents a large amount of evidence to back up the assertion that the color of the fires does not indicate their severity. Again, while technically true, the Guide over simplifies the situation and ignores other points. While the color of the smoke may not indicate exactly how severe the fires really were, there are other characteristics that can give better indications. The following gives a summary of the observed severity of the fires at their greatest extents.

- Fires in the North Tower covered extensive regions, at least near the perimeter walls, of about three floors. Fires in the South Tower also extended over about three floors, but were more localized to one side of the building.
- The fires were not hot enough to produce significant window breakage in either Tower. Window breakage is a common occurrence in large office fires, particularly when temperatures exceed 600° C.
- The flames mostly remained within the buildings. Significant emergence of flames from the buildings, another common feature of large office fires, was only observed in a limited region of the North Tower.
- The fires did not spread significantly beyond the impact region. With the exception of a region of fire about 10 floors above the crash zone in the North Tower, the fires remained around the impact zones.
- The fires did not cause parts of the building to glow. At temperatures above 700° C, steel glows red hot, a feature that is visible in daylight.[33]

These characteristics are easily visible in the multiple videos and photographs of the WTC. However, these characteristics do not indicate the fires in at least the South Tower were particularly severe.

6:51 In fact, **the towers did what they were built to do.**

6:55 Frank A. De Martini: **“The building was designed to have a fully loaded 707 crash into it -- that was the largest plane at the time. I believe that the building probably could sustain multiple impacts of jetliners because this structure is like the mosquito netting on your screen door -- this intense grid -- and the jet plane is just a pencil puncturing that screen netting -- it really does nothing to the screen netting.”**

No disrespect intended, but the late Mr. De Martini's analogy is clearly a little simplistic. It does not take into account the fact that, unlike a screen door, the Twin Towers were not suspended in a frame and they were not as flexible as netting.

There are a lot more reasons we could expand into but we do not feel it is worth the time. If you cannot see why the World Trade Center buildings and screen netting are not literally comparable – we are sorry, but that is your own problem.

Actually, as we will see, the Towers were designed to be fairly flexible and strong.

7:33 The towers were built to withstand 140-mile-an-hour gusts produced by winter storms. Anyone in them on a windy day could feel them swaying. **The single impact of a jetliner was no more of a blow than the continued battering of a hurricane.**

Wrong.

The wind force placed on the towers during a hurricane would have been dispersed over the entire outer faces of the building. More important is the speed differentiation between the jet impacts and that of a hurricane.

Category five (highest category) hurricanes travel no faster than 250 mph (and that is also rather generous).

<http://hypertextbook.com/facts/StephanieStern.shtml>

“Winds in some stronger storms may exceed 200 mph.”

The jet impacts on 9/11 were focused into a small area of the building. This caused **internal and external** damage. This included severing critical core columns and igniting fires within the building. Several perimeter columns were also removed by the plane impacts.

The speeds of impact on 9/11 were 490 mph for WTC1 and 590 mph for WTC2. Hardly comparable to a 200mph wind gust dispersed over the entire building.

This assessment is reasonably fair, as the planes did cause a large amount of structural damage, something a hurricane wouldn't do. However, according to Dr. Thomas Eagar, the overall impact of the planes, in terms of how much stress the buildings could take, was much less severe than a hurricane.

The early news reports noted how well the towers withstood the initial impact of the aircraft; however, when one recognizes that the buildings had more than 1,000 times the mass of the aircraft and had been **designed to resist steady wind loads of 30 times the weight of the aircraft**, this ability to withstand the initial impact is hardly surprising. Furthermore, since there was no significant wind on September 11, the outer perimeter columns were only stressed before the impact to around 1/3 of their 200 MPa design allowable.[34]

8:05 New Yorkers were stunned, one hour later, when the first tower fell.

8:13 Les E. Robertson: “To the best of my knowledge, the considerations of the fuel in the airplane -- in terms of an explosion or a great fire -- was not considered. Now ... we were not

responsible for that aspect of the design...” 8:27 Imagine – **building expressly for airplane impact, but never thinking of the fuel.**

Throughout 9/11 Mysteries, we are constantly reminded how “jet fuel could not have brought down the towers”, and “fires could not have blown beams this far” etc.

By the standards of 9/11 Mysteries, the towers were practically immune to fire and burning kerosene. 9/11 Mysteries’ assertion that “jet fuel could not bring the towers down” should mean that the fact that jet fuel was not considered should not matter at all. Why do the creators suddenly care about jet fuel then? 9/11 Mysteries leads us to believe the jet fuel was harmless, and now this? This is one of the first contradictions we see in 9/11 Mysteries. It shows us how the creators must know that fire and jet fuel can have horrible effects on steel structures, but still claim that jet fuel could not have brought the towers down.

This long, rambling criticism completely ignores the film’s overall point, which is the obvious absurdity of designing a building to take the impact of a plane, but forgetting about the fuel. As we have already seen, according to lead WTC engineer John Skilling, the fires were taken into consideration and would not have caused the buildings to collapse.

Steel Buildings

In this section we will examine the Guide’s repeated attempts to undermine the case for controlled demolition by means of misrepresenting how fire affects different structures.

8:41 **Never before in the history of the world has a steel building collapsed due to fire.**

8:50 Jonathan R. Barnett, Ph.D.: “I have not seen until recently a protected steel structure that has collapsed in a fire.”

8:54 **True infernos have raged hot and long in steel-framed buildings, but not one of the buildings ever came down.**

I will counter that with a similar statement. Never before in the history of the world has a building had a 767 airliner slammed into it at 490mph.

Never before in the history of the world has a building had a 110-story building fall onto it creating a 20-story hole in the lower section of the building, along with a subsequent seven hours of fire. This applies to WTC7, which 9/11 Mysteries discusses later in the film.

The statement that no steel building has ever collapsed due to fire is deceptive because it fails to take into account the several other factors that contributed to the collapse of all three World Trade Center buildings that collapsed on 9/11.

The Guide clearly makes a strong attempt to imply that the conditions of the Towers and Building 7 were special, and therefore not comparable to other events. While it is true that 9/11 was a day of a lot of firsts, it needs to be adequately assessed how different the conditions of the WTC were in comparison to similar events. The most often heard claim by debunkers is that the Towers did not just collapse from the fires, but also from the structural damage from the plane impacts. Many will generally see this as a valid argument, as a 767 has never crashed into a building. However, what the Guide fails to discuss is how much damage there was at the floors where the collapses initiated.

According to the NIST Report, the collapse of WTC1 initiated at the 98th floor. The 98th floor of the North Tower was the highest point where the plane impacted. While floors 95 and 96 were hit by the fuselage and engines, floor 98 was only hit by the tip of the starboard wing.



According to NIST, there were approximately five perimeter columns severed and no core columns severed on the 98th floor. The core provided 50% of the structural support, so the five severed perimeter columns made up slightly more than 1% of the gravity loads for the Tower. The central impact point at the 95th and 96th floors were far more damaged than floor 98, which is where the collapse initiated. It may be argued that the severe damage to the lower floors may have had some effect on the strength of the upper floors. However, the fact that a floor that suffered comparatively little damage collapsed before a floor that suffered comparatively heavy damage indicates that the impact damage did not play a defining role in the collapse. Similarly, the floor where the collapse of the South Tower initiated, floor 82, had less damage than other impacted floors.[35]

This data, combined with the fact that, at least in the case of the North Tower, the initial tilt of the upper section was not in the direction of where most of the

structural damage was, indicates that the structural damage played little role in the collapse.

As for WTC7, the damage that it sustained from the collapse of WTC1 has been used constantly by defenders of the official story as evidence that the building was going to collapse. The Guide claims that a “20-story hole” was caused by the debris from the North Tower. This photo of Building 7 is usually shown to back up this claim.



Indeed, there appears to be quite a lot of structural damage at the lower floors. But just how much damage was there? The Guide claims it was 20 floors, but the building’s lower floors are obscured by another building. Regardless, new photographs released by NIST show that the damage was actually less severe than previously thought.



From this angle, we can see that the damage was only on about 7 to 8 floors, and that it didn't reach the ground. Therefore, the damage that WTC7 sustained was not as severe as the Guide portrays. But regardless, the official NIST report concluded that the structural damage played little to no role in initiating the collapse.

The debris caused structural damage to the southwest region of the building-severing seven exterior columns-but this structural damage did not initiate the collapse... Even without the structural damage, WTC 7 would have collapsed from the fires that the debris initiated.[36]

Therefore, the idea that the structural damage played any huge role in the initiation of collapse in any of the WTC buildings has little merit.

Regardless, the simple fact here is that many steel framed buildings have collapsed due to fire. Why 9/11 Mysteries tells us that none have is beyond us. Take, for example, the fire at the McCormick Place exhibition hall in Chicago.

<http://www.wconline.com/CDA/Archive/24ae78779d768010VgnVCM100000f932a>

"As an example of the damaging effect of fire on steel, in 1967, the original heavy steel-constructed McCormick Place exhibition hall in Chicago collapsed only 30 minutes after the start of a small electrical fire."

http://www.chipublib.org/004chicago/disasters/mccormick_fire.html

"The unprotected steel roof trusses failed early on in the fire"

http://www.iaei.org/subscriber/magazine/02_d/berhinig.htm

"The McCormick Place fire "is significant because it illustrates the fact that steel-frame buildings can collapse as a result of exposure to fire. This is true for all types of construction materials, not only steel." wrote Robert Berhinig, associate manager of UL's Fire Protection Division and a registered professional engineer."

Admittedly, 9/11 Mysteries should have phrased its statement about steel buildings a little better. It would have been more accurate to say that no steel-framed high-rise skyscraper has ever totally collapsed from fire, which is true.[37] But the Guide's comparison of the WTC Towers to the McCormick Place is highly deceptive for a number of reasons.

Comparisons of the McCormick Place incident to the collapses of the Twin Towers are sometimes made because the [floor diaphragms](#) on that constituted most tenant-space floors in the Towers were also supported by web trusses.

The first fact that should be noted in regard to any such comparison is that the McCormick Place incident was not a total building collapse -- it was only a roof collapse. Much less was it the total collapse of a high-rise building. Any comparison of it to the Twin Towers is limited to the Towers' floor diaphragms. FEMA blamed the heat-induced failure of the Towers' floor diaphragms, but failed to provide a convincing explanation of how floor failures could have led to total building collapse. Moreover, the alleged failure of the Towers floor trusses has lost relevance with [NIST](#)'s endorsing the [column failure theory](#) to the exclusion of the [truss failure theory](#).

Furthermore, the comparisons of the roof trusses of McCormick Place to the floor trusses of the Twin Towers is limited by the following facts:

- The floor trusses were insulated, unlike the roof trusses.
- The floor trusses spanned at most 60 feet, apparently much shorter than the roof trusses.
- The floor trusses had to support the floor loads of the concrete slabs and office furniture, whereas the roof trusses only had to support snow loading.[38]

Let's be clear. Most people in the Truth Movement do not claim that steel can't fail due to fire. Obviously it can. What we do claim is that fire has never caused the total collapse of a high-rise skyscraper in incidents where the fires were far more severe than the fires in any of the WTC buildings. As noted above, the collapse of

the McCormick Place roof was caused by connections failing, as was the collapse of the Sight and Sound Theater that the Guide also mentions.[39] However, as NIST's report on the Twin Towers makes clear, the buildings supposedly collapsed because the connections did not fail. Therefore, the circumstances of the Twin Towers' collapses were very unique, and not a single building collapse has been presented that matches those same conditions.[40]

9:07 In 1975, the World Trade Center's North Tower suffered a nighttime fire that flamed for three hours, **spreading vertically from floor to floor. It burned twice as long as the fires of 9/11, without even a hint of a building collapse.**

Only the 11th floor sustained significant fire damage in the 1975 North Tower fire.

True, the fire did climb floors, but it never left the concrete-enclosed cable shaft on the other floors.

Moreover, firefighters had full access to the fire. In contrast, firefighters were unable to fight the fires in WTC1, WTC2 and WTC7 on 9/11.

In 1975, the building was not hit by an airliner at 490 mph – 590 mph and, therefore, did not have resulting structural damage to load-bearing columns and beams.

Finally, the fire was not fueled by an accelerant such as the 10,000 gallons of jet fuel that escaped each airliner on 9/11. Although some of this exploded into the fireballs, there was still fuel left in the buildings to burn and spread fire.

The 1975 fire was admittedly less severe than the fires in the North Tower on 9/11. A small section at 911research had this to say about the incident:

Although the data on this fire is limited -- there apparently being no publicly available photographs of it -- it was clearly less severe than the [2001 North Tower fire](#), though of longer duration. However, it may have been more severe than the [South Tower fire](#).**[41]**

9:20 In February 2005, the Windsor Tower in Madrid, a skyscraper undergoing reconstruction, sustained a 20-hour fire. This is what was left -- a standing building strong enough to support a crane.

9:40 Compare a 20-hour inferno to **90 minutes of smoke.**

As I indicated before, the “90 minutes of smoke” theory in 9/11 Mysteries is baseless and flawed. For more, please see Section 2.2.7 of the 9/11 Mysteries Viewer's Guide, or the section of the 9/11 Mysteries Viewer's Guide website that deals with the chapter of 9/11 Mysteries, “The Myth”.

Now, for the Windsor Tower. The Windsor Tower differed completely from the construction of any of the World Trade Center towers.

<http://www.concretecentre.com/main.asp?page=1095>

“The building totalled 32 storeys, with 29 floors above ground and three below. A concrete core and concrete frame supported the first 16 floors. Above that was a central support system of concrete columns, supporting concrete floors with steel perimeter columns. An additional feature was the presence of two 'technical floors' - concrete floors designed to give the building more strength. One was just above the ground level and the other at the 17th floor.”

From this, we can see that the Windsor Tower had no reliance on steel frames. The World Trade Center did. The core of the Windsor Tower was mostly concrete. Moreover, a large number of the steel elements in the Windsor Tower did fail.

<http://www.concretecentre.com/main.asp?page=1095>

“The steel columns above the 17th floor suffered complete collapse, partially coming to rest on the upper technical floor.”

Photographic records of the Windsor Tower fire clearly show where the steel failed exposing the concrete sections of the building.

Image -> <http://www.concretecentre.com/images/casestudy/madridwindsortower04.jpg>

Image -> <http://www.concretecentre.com/images/casestudy/madridwindsortower05.jpg>

In summary, the Windsor Tower fire shows us:

- Steel columns will fail in a fire.
- Concrete is more fire resistant than steel.

Considering the huge differences in building design and the results of the fire, we fail to see how the Madrid Windsor fire does anything for the case that 9/11 Mysteries is presenting other than damage it.

Here I happen to agree with the 9/11 Mysteries Guide that the Madrid Building is not very comparable to any of the WTC buildings. The building is often cited by members of the Truth Movement because of the incredible amount of time the fires burned without causing a total collapse. 9/11research outlines several factors about the Madrid Building:

The observation that the Windsor Building is the only skyscraper to have suffered even a partial collapse as a result of fire suggests that the use of steel-reinforced-concrete framing was responsible. A closer look at the incident shows reality to be more complex. The portion of the building that collapsed consisted of the outer portions of floor slabs and perimeter walls throughout the upper third of the building (the 21st through 32nd floors). The outer walls consisted of steel box columns arranged on 1.8 meter centers and connected by narrow spandrel plates. The columns had square cross-sections 120mm on a side, and were fabricated of C-sections 7mm thick welded together. (these had a fraction of the dimensions, and were spaced

about twice as far apart as the [perimeter columns of the Twin Towers](#).) The perimeter columns lacked fireproofing throughout the upper third of the Windsor building.

The Windsor Building fire engulfed the upper third of the building, but also spread downward as low as the fourth floor. A report by two fire safety experts in Japan highlighted three causes for the very wide extent of the fire:

- The lack of a sprinkler system
- Incorrect installation of spandrels
- The lack of fire prevention regulations in Spain

The Windsor Building fire demonstrates that a huge building-consuming fire, after burning for many hours, can produce the collapse of parts of the building with weak steel supports lacking fire protection. It also shows that the collapse events that do occur are gradual and partial.

Estimated time frame of collapses

Time	Collapse Situation
1:29	East face of the 21st floor collapsed
1:37	South middle section of several floors above the 21st floor gradually collapsed
1:50	Parts of floor slab with curtain walls collapsed
2:02	Parts of floor slab with curtain walls collapsed
2:11	Parts of floor slab with curtain walls collapsed
2:13	Floors above about 25th floor collapsed Large collapse of middle section at about 20th floor
2:17	Parts of floor slab with curtain walls collapsed
2:47	Southwest corner of 1 ~ 2 floors below about 20th floor collapsed
2:51	Southeast corner of about 18th ~ 20th floors collapsed
3:35	South middle section of about 17th ~ 20th floors collapsed Fire broke through the Upper Technical Floor
3:48	Fire flame spurted out below the Upper Technical Floor
4:17	Debris on the Upper Technical Floor fell down

These partial collapse events, spread over several hours, contrast with the [implosion of WTC Building 7](#) in 7 seconds, and the total [explosive collapses of each of the Twin Towers](#) in under 17 seconds.[42]

9/11 Mysteries would have done much better in comparing the WTC buildings to other 100% steel-framed high-rises, such as the One Meridian Plaza[43] or the First Interstate Bank[44], which, like the Towers, were tube-within-tube designs (although not quite the same).

9:52 Why are buildings made of steel? Strong, light and flexible, steel frames offer many advantages over wood and concrete, especially where skyscrapers are concerned. Steel makes big buildings relatively light, with tremendous load-bearing capacity. The upper floors won't crush the floors beneath them, and **steel holds up better to weather and fire.**

The assertion that steel holds up better to fire is not backed up with evidence by 9/11 Mysteries. In fact, let's use the Madrid Windsor Tower again.

<http://www.concretecentre.com/main.asp?page=1095>

"This case study is an example of the excellent performance of a concrete frame designed using traditional methods and subjected to an intense fire. It also highlights the risks when active fire protection measures fail or are not included in steel frame construction."

Furthermore, an article named "Concrete vs. Steel" shows us that concrete offers advantages over steel in terms of fire and explosions.

<http://www.buildings.com/Articles/detailBuildings.asp?ArticleID=2511>

"Cast-in-place reinforced concrete offers outstanding resistance to explosion and/or impact. Moreover, it can endure very high temperatures from fire for a long time without loss of structural integrity," says Alfred G. Gerosa, president, Concrete Alliance Inc., New York City. Concrete requires no additional fireproofing treatments to meet stringent fire codes, and performs well during both natural and manmade disasters."

Let's also consider the development of the newly re-built World Trade Center 7 building. The new WTC7 was built with a concrete core as opposed to a steel core. This was done specifically so that the building can withstand fire and explosions. So, if steel holds up better to fire, why use a concrete core in the new WTC7?

The Guide's assertion that concrete performs better than steel in fires may be true, but the fact that the building was constructed with both a steel-framed and steel-reinforced concrete design could have affected the way the fires harmed the Madrid Building.

- Steel is a good conductor and concrete is a poor conductor of heat. Thus in a fire, a steel frame will conduct heat away from the hotspots into the larger structure. As long as the fire does not consume the larger structure, this heat conductivity will keep the temperatures of the frame well below the fire temperatures. The same is not true of steel-reinforced-concrete structures, since concrete is not a good thermal conductor, and the thermal conductivity of the rebar inside the concrete is limited by its small mass and the embedding matrix of concrete.
- Fires can cause spalling of concrete, but not of steel. This is because concrete has a small percentage of latent moisture, which is converted to steam by heat. Thus, a large fire can gradually erode a concrete structure to the point of collapse, whereas a fire can only threaten a steel-framed structure if it elevates steel temperatures to such an extent that it causes failures.[45]

WTC Design and Construction

11:28 The story we were told: This rock-like steel grid gave way because fire warped the trusses, causing the bolts to fail. **As the trusses sagged and fell, the floors dropped with them.**

It is important to note here how simplistic this explanation is. NIST words this far better in their FAQ regarding the WTC investigation.

http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

“Based on this comprehensive investigation, NIST concluded that the WTC towers collapsed because: (1) the impact of the planes severed and damaged support columns, dislodged fireproofing insulation coating the steel floor trusses and steel columns, and widely dispersed jet fuel over multiple floors; and (2) the subsequent unusually large jet-fuel ignited multi-floor fires (which reached temperatures as high as 1,000 degrees Celsius) significantly weakened the floors and columns with dislodged fireproofing to the point where floors sagged and pulled inward on the perimeter columns. This led to the inward bowing of the perimeter columns and failure of the south face of WTC 1 and the east face of WTC 2, initiating the collapse of each of the towers. Both photographic and video evidence—as well as accounts from the New York Police Department aviation unit during a half-hour period prior to collapse—support this sequence for each tower.”

The collapse initiation was not a 'pancake' style collapse. The collapse was not initiated by a single floor failing, causing a chain reaction. Instead, all of the floors above the impact point on each tower all came down onto the lower structure at the same time.

Here, the Guide presents a section of NIST’s FAQ on the WTC, which lists several elements that allegedly caused the buildings to collapse, which include:

- **The impact of the airplanes.**
- **The dislodging of the fireproofing.**
- **The dispersal of jet fuel on several floors.**
- **The fires produced by the jet fuel.**
- **The weakening of the floors and columns due to high temperatures.**
- **And the inward bowing of the perimeter columns caused by the sagging of the floor trusses.**

As we will see, each of these elements is extremely problematic. The Guide goes onto to criticize the films repeated statement that the cores of the Towers collapsed when the rest of the structure collapsed. Having already addressed this issue, I feel no need to restate the same rebuttal.

12:20 **The official story’s central thesis is based on heat -- temperatures high enough to weaken steel. But people in the towers did not report such heat. Think about it --neither**

steel, concrete, nor glass can burn. So what, in those buildings, could have burned to make such heat?

Again, the NIST FAQ answers this question. If the creators of 9/11 Mysteries had even read the FAQ of the NIST report, they would know this. It is understandable if you cannot read all 10,000 pages of the report due to time restrictions or work load, etc. But the fact that even the small FAQ summary of this report explains this shows us that critical steps of the research phase were skipped or ignored by 9/11 Mysteries.

“Normal building fires and hydrocarbon (e.g., jet fuel) fires generate temperatures up to about 1,100 degrees Celsius (2,000 degrees Fahrenheit). NIST reported maximum upper layer air temperatures of about 1,000 degrees Celsius (1,800 degrees Fahrenheit) in the WTC towers (for example, see NCSTAR 1, Figure 6-36).”

The idea that the fires in the WTC could have reached those temperatures is extremely unlikely. Thomas Eagar has noted that the diffuse-flame hydrocarbon fires in the Towers would likely have not reached those sorts of temperatures.

In combustion science, there are three basic types of flames, namely, a jet burner, a pre-mixed flame, and a diffuse flame... A fireplace flame is a diffuse flame burning in air, as was the WTC fire. Diffuse flames generate the lowest heat intensities of the three flame types... The maximum flame temperature increase for burning hydrocarbons (jet fuel) in air is, thus, about 1,000°C... But it is very difficult to reach this maximum temperature with a diffuse flame. There is nothing to ensure that the fuel and air in a diffuse flame are mixed in the best ratio.[46]

What’s more, NIST has absolutely no evidence that any of the steel in the WTC was heated to high enough temperatures to cause collapse in the first place.

Observations of paint cracking due to thermal expansion. Of the more than 170 areas examined on 16 perimeter column panels, only three columns had evidence that the steel reached temperatures above 250 °C: east face, floor 98, inner web; east face, floor 92, inner web; and north face, floor 98, floor truss connector. Only two core column specimens had sufficient paint remaining to make such an analysis, and their temperatures did not reach 250 °C. ... Using metallographic analysis, NIST determined that there was no evidence that any of the samples had reached temperatures above 600 °C.[47]

The highest temperatures estimated for the samples was 250 °C (482 °F). That's consistent with the results of fire tests in uninsulated steel-framed parking garages, which showed maximum steel temperatures of 360 °C (680 °F).[48] And yet NIST still suggests that the temperatures of the fires actually reached 1800 °F, with no physical evidence to back up that claim. Of course, NIST simply claimed that the physical tests did not generalize their results, since the examined columns only represented 3 percent of the perimeter columns and 1 percent of the core columns from the fire floors. However, NIST’s findings on the basis of this tiny percent of the steel are far from irrelevant, because they are the only

scientific evidence available as to the temperatures reached by the steel in either Tower. Therefore, any speculation that the rest of steel had reached higher temperatures would be just that—pure speculation backed up by no empirical data.

12:43 How do these firefighters describe the collapse of the North Tower?

12:52 Firefighter 1: “We started running... Floor by floor, it started popping out...”

Firefighter 2: “It was **as if** they had detonators.” Firefighter 1: “Yeah, detonators, yeah...”

Firefighter 2: “**As if** they planned to take down a building. Boom, boom, boom, boom, boom!”

Firefighter 1: “All the way down. I was watching it and running.”

Notice that before every description cited above, there are the words “**as if**”. Don't you think that if these heroic firefighters actually thought that detonators were going off in the building, they would have said so?

This is what is known as a simile. It indicates that a similar effect was created by something that **was not** actually detonators. The definition of simile is:

simile

noun figure of speech that expresses a resemblance between things **of different kinds*** (usually formed with 'like' or '**as**')

* = Emphasis mine

More important to note are the actions that the NYFD **did not** take after 9/11. If so many firefighters are so sure that the buildings were brought down in controlled demolitions, why aren't they at Ground Zero demanding a new investigation? Why aren't they making themselves heard?

Similes should never be mistaken for literal statements.

In his comprehensive essay, Professor Graeme MacQueen examines the testimony of 503 first responders of 9/11.[49] Of them, he documents that 118 of them reported explosions had occurred when the WTC collapsed. And in his essay, he also examines why many in the FDNY may have changed their minds about what they experienced that day.

As will be apparent to anyone who reads through Appendix B, many members of the FDNY came to believe, in the period between 9/11 and their interviews, that they had been mistaken in interpreting what they perceived as evidence of explosions. Some suggest in their interviews that they now (as of the interview date) realize they witnessed non-explosive collapse, with the implication that they face the task of fitting what they originally perceived into the new framework. A few adopt the new framework readily; others do so reluctantly; and still others are unwilling to do so at all. I have not attempted in Appendix B to delete references to change of mind: on the contrary, I have included them because I find them fascinating and instructive. In

some cases we can almost feel the struggle of the interviewee to accept the new interpretive frame.[50]

12:58 **And others give similar descriptions:**

13:06 News reporter: “At 10:30 I tried to leave the building, but as soon as I got outside I heard a second explosion and another rumble and more smoke and more dust – and then a fire marshall came in and said we had to leave because if there was a third explosion, this building might not last.”

We are still waiting for evidence that these sounds were actually explosions, let alone explosives.

People can use words like “explosion” or “bomb” to describe what they heard whilst in, or near, the World Trade Center. There is no absolute rule that states that “loud noise = explosion”. It is not that simple.

First, you have to prove that these noises were actually explosions. What causes them does not matter at this point. However, once you have proved that the noises people heard were actually explosions, you would then have to prove that they were caused by explosive devices. 9/11 Mysteries fails to do either of these two things.

Please keep in mind that the comments made in reference to “explosion sounds” in this guide are directed at the makers of “9/11 Mysteries” and not at the people making the comments themselves.

The Guide continuously argues that just because we do not know the source of these explosive sounds, they are not worthy of being considered evidence of controlled demolition of the Twin Towers. What’s important to note is that, while explosions in themselves are very difficult to categorize as anomalous, as there are several things that can cause an explosion or explosive sound, we should take into consideration how the witnesses perceived these explosions. As can easily be seen from reading through Graeme MacQueen’s essay, almost all of the first responders who had reported explosions right before and during the collapses had spoken about these explosions in a way that clearly indicated that they believed the explosions had contributed to the collapses. Although explosions can occur in any number of events (even building fires), what we have to acknowledge is that the event of explosions preceding the total collapse of a steel-framed high-rise skyscraper has ONLY ever occurred in a controlled demolition. We know that fire has never caused both of these events—explosions AND the total collapse of a steel high-rise—in one setting. These have only ever happened in demolitions. Therefore, ruling out explosives as a cause of collapse, based only on the argument that the cause of the explosions was not definitive, is not viable.

3:23 Man in a hospital bed: "...like, **it sounded like gunfire**. You know -- bang, bang, bang, bang, bang! And then all of the sudden three big explosions..."

Consider this:

<http://tinyurl.com/ma5se>

"After receiving first aid, she was put in another car to go down to an ambulance. As the elevator doors closed, rescue workers heard what **sounded like a gunshot but what was, in fact, the snapping of elevator cables weakened by the crash**. The car with Oliver inside, now at the 75th floor, plunged to the sub-basement, a fall of over 1,000 feet."

The previous quote is regarding the 1945 crash of a B25 into the Empire State Building.

We can see from this that structural failure in certain sections of the building can sound like "gunshots" or "explosions". Please keep in mind that I am not for one minute saying that the noises that this man heard were actually elevator cables snapping.

Using a conspiracy theorist's logic, any loud noise heard in a building that has suffered structural damage must be an explosion. As we can see from researching the Empire State Building example, a dismissal of anything that disagrees with the "explosives" hypothesis is a logical fallacy because there are several alternate explanations available.

13:29 **Man on street**: "...started walking down the stairs to the 8th floor -- big explosion -- blew us back into the 8th floor..."

13:33 **News reporter**: "Do you know if it was an explosion or if it was a building collapse?"

Police officer: "To me, it **sounded like** an explosion"

News reporter: "...but it was a huge explosion..."

Again, this police officer states that the building collapsing "sounded **like** an explosion" when he was asked if he thought that the building had collapsed or exploded. There is no evidence contained in this statement that this noise was an explosion. In fact, he is clearly talking about the moment the building's upper stories fell onto the static lower building. Regardless of this, 9/11 Mysteries has failed to prove that this noise was **literally** an explosion, let alone an explosive device.

The 10,000 page NIST report concluded that the building's collapse initiation was caused by the outer columns being pulled inwards by sagging trusses. It has been proved beyond reasonable doubt through the NIST investigation that explosives did not initiate the collapse of the Twin Towers. This video clearly shows the columns being pulled in before collapse.

Video -> <http://video.google.com.au/videoplay?docid=-540555553528290546>

This man heard something that sounded like an explosion. The falling upper section of the Towers is a far better explanation for this loud sound than an explosive device.

The Guide's assertion that the inward bowing of the Twin Towers' perimeter columns invalidates that explosives were used is severely flawed. It does nothing to explain the explosive destruction of the lower floors after the upper sections began to give way. What should be considered is that explosives or incendiaries could very well have been used to cut the columns in the WTC, which in turn could have caused the columns to be pulled inward.[51]

13:44 Pat Dawson, NBC News: "**Chief Albert Turi** told me that he was here after the events that took place this morning. He tried to get his men out as quickly as he could, but he said that there was another explosion which took place ... and then an hour after, there was another explosion in one of the towers here. So, according to his theory, **he thinks there were actually devices that were planted in the building.**"

This is a quote from Albert Turi.
<http://tinyurl.com/yy9cdg>

"The next thing I heard was Pete say what the [explicit deleted] is this? And as my eyes traveled up the building, and I was looking at the south tower, somewhere about halfway up, **my initial reaction was there was a secondary explosion**, and the entire floor area, a ring right around the building blew out. **I later realized that the building had started to collapse already and this was the air being compressed and that is the floor that let go.** And as my eyes traveled further up the building, I realized that this building was collapsing and I turned around and most everybody was ahead of me running for the garage, and I remember thinking I looked at this thing a little bit too long and I might not make this garage. But I did."

Albert Turi, like many other people who said they heard explosions on 9/11, has since come forward and explained what caused the noise he heard that he initially described as an explosion. 9/11 Mysteries appears to have ignored this.

Again, as Graeme MacQueen points out, many of the firefighters may have changed their minds based on what they learned or what they were told afterwards.

Maybe the non-explosion interpretation gained ground as the result of reflection, reading and a gradual maturing of judgment. In this case we might speak of a process of education. But maybe the change in interpretation resulted from an undercutting of witnesses' perception by the theories and claims of "experts," institutional superiors and government leaders, in which case we might prefer to speak of the "re-education" or indoctrination of the FDNY witnesses. I mentioned earlier the concern of Mr. Von Essen that the oral histories be recorded "before they became reshaped by a collective memory." Now we see the soundness of his intuition. Early in 2004 Rodger Herbst suggested that, in explaining the collapse of the towers, explosion hypotheses came first and were only gradually supplanted by "politically correct revisionist theories." We now have solid evidence suggesting that, for the FDNY, nonexplosive collapse is, indeed, a revisionist theory.[52]

14:02 **Reports of bombs in the buildings**, explosions. A CBS reporter to Dan Rather:

14:16 Carol Marin, CBS News: "...but I was coming toward the World Trade Center looking for CBS crews, and asked a firefighter if he saw any. All of the sudden there was **a roll, an explosion**, and we could see coming at us a **ball of flame** stories high."

People described what sounded like bombs, but no one reported a bomb. Not one person actually claims to have seen a physical explosive device such as a bomb or a cutter charge in any part of the buildings before or during the events of 9/11. Not even the witness they show us after this commentary reports a bomb. She reports a roll, an explosion and a ball of flame. How do you get "bomb" out of that? Can you get "explosion" out of that? Maybe. That does not mean that a bomb caused this explosion.

9/11 Mysteries is not working very hard to convince us that bombs were planted in the building. Again, "explosion" does not equal "bomb"

While it is true that there are no reports of explosives actually being seen in the Towers, the Guide's claim that "no one reported a bomb" is simply not true. There were in fact numerous reports on 9/11 of large amounts of explosives being found in vans in New York.[53] There was a least one report of bombs being planted around the WTC.[54] While I cannot say for certain how these reports of explosives directly pertain to the demolition of the WTC buildings, the fact that there were confirmed reports of bombs makes it all the more ridiculous to rule out the idea that the sounds of explosions didn't come from explosives.

14:28 Listen to the **sound of a large explosion** right before the South Tower begins to fall.

14:46 Sound reaches us after what we see. If the "boom" we just heard was the sound of the building collapsing, it would FOLLOW the collapse. **Instead, the "boom" is heard before.**

Speculation. We are nearly at the 15-minute mark. So far, 1/5 of the film has been dedicated to "explosion sounds". Yet 9/11 Mysteries has not **proved** anything.

So, there were loud noises before the collapse and that is it? **9/11 Mysteries has not proved that this alleged explosion was actually an explosion rather than structural elements of the building failing pre-collapse.** There are alternate explanations to these sounds that are far more reasonable and convincing than explosive devices. Due to the fact that the burden of proof is on 9/11 Mysteries, and the fact that they have failed to prove anything - we have gained nothing from the past 4 minutes of footage.

4 minutes of speculation and no solid evidence.

While the Guide considers this to be "speculation," the fact still remains that an explosive sound can be heard right as the building begins to collapse, another

event that has only ever happened in a controlled demolition. One thing that I will point out is that even though there is a large amount of testimonies of explosions occurring right before and during the collapses of the Towers, according to the NFPA 921 guide, the actual “sounds” of explosions does not define an explosion.

“...Although an explosion is almost always accompanied by the production of a loud noise, the noise itself is not an essential element in the definition of an explosion. The generation and violent escape of gases are the primary criteria of an explosion.”[55]

Let’s be clear. Explosion sounds can be explained away. But, only after a thorough investigation. When there is this much witness testimony, evidence, and explosive use by terrorists on this very same complex[56], there is no excuse for refusing to test for explosive residue.

15:04 [voice of **Dylan Avery**:] “Ho, whoa, whoa -- bring it back...”

For those who do not know, Dylan Avery is the creator of the popular conspiracy film “Loose Change”.

For rebuttals to this film, please see the following links.

<http://www.loosechangeguide.com>

<http://www.lolloosechange.co.nr>

<http://video.google.com.au/videoplay?docid=-7216643725166640147>

More constructive criticisms of the film Loose Change have been done by Michael Green[57] and Jim Hoffman[58]. I myself have made a rebuttal to the film “Screw Loose Change”—a film purporting to debunk Loose Change.[59]

WTC Demolition

18:12 MIT engineering professor **Thomas Eagar’s 2001 paper** is **officially considered the academic standard for explaining the World Trade Center collapses**. In it he tells us that steel loses half its strength at 650 degrees Celsius, and that the fires that day did not get much hotter than this. He stresses, however, that the fires did not burn evenly.

Thomas Eagar's 2001 preliminary paper is not “officially” anything. The NIST report along with the 9/11 Commission report are the **official** investigations into 9/11. They are the result of years of extensive study and scientific testing (NIST). The NIST report is the “academic standard for explaining the World Trade Center Collapses”. Again, we are not saying that Mr. Eagar is wrong. We are simply pointing out that 9/11 Mysteries is arguing against unofficial reports and claiming that they are official investigations into 9/11.

19:16 In plain language, straight from MIT:

(bulleted text) **Fires not hot enough to melt steel**

Nevertheless, hot enough to weaken the steel to 50% of its original strength.

No one said the steel melted. No steel needed to melt for the buildings to collapse.

As I've already shown, NIST has no evidence that any of the steel had been heated to temperatures where it would have lost half its strength.

19:16 In plain language, straight from MIT:

(bulleted text) **Uneven fires deformed some of the steel**

This is simplistic, to say the least. Uneven fires deformed some of the steel, true. However, 9/11 Mysteries fails to acknowledge that the steel that was weakened was located in key structural areas, such as the floor supporting trusses connected to the perimeter columns.

There is no physical evidence to show that this is what happened.

Some floors fell – smashing the entire building

Again, 9/11 Mysteries has over-simplified the argument. Some floors means 12 floors for WTC1 and 28 floors for WTC2. 9/11 Mysteries fails to note this and instead leaves the number of floors up for speculation.

To be fair, the upper portions of both of the Towers, as they collapsed, were greatly reduced in size before the lower portions began to give way. This will be expanded on later.

19:16 In plain language, straight from MIT:

(bulleted text) **Dr. Eagar ... what happened to the core?**

The core was explained in previous sections of this rebuttal. See the chapter of this guide that rebuts “The Myth” section of 9/11 Mysteries (specifically section 2.2.6).

As I have already shown, the crucial parts of the cores did fail first during the collapses.

19:41 **What do falling buildings look like?**

19:46 **What do demolitions look like?**

In this section of 9/11 Mysteries, we are shown examples of buildings that have fallen. It is interesting to note that none of these buildings has met any of the conditions that any of the

three World Trade Center buildings experienced. No fire, no airliner or falling building colliding with them and clearly different in design.

Their question is worded incorrectly. It should be:

“What do skyscrapers that have fallen from the top down due to an airliner colliding with them at 490 mph, accompanied by ensuing fires and structural failure at the point of impact look like?”

Or, for WTC7:

“What do skyscrapers that have fallen after the bottom 20 stories were severely damaged by the collapse of a 110 story building next door, accompanied by ensuing fires that raged for 6 hours (unfought) look like?”

We listed WTC7 despite the fact that the collapse demonstrates none of the traits of a controlled demolition, such as puffs of smoke, bangs, flashes, loud noises etc.

If you cannot see what we are getting at, we will make it simple. There has never been an event similar to 9/11 in the history of the world. No building has ever been exposed to similar conditions.

Once again, the Guide dismisses other examples of damaged buildings purely on the basis that the Towers were hit by airplanes while other buildings have not. The Guide makes no attempt to quantify how much damage the plane impacts actually caused and how much different the Tower’s conditions were in comparison to other buildings. As I have already shown, the structural damage likely played little role in initiating the collapse of the Twin Towers, and according to NIST, damage played no role at all in initiating the collapse of Building 7.

Also, the Guide’s claim that the collapse of WTC7 demonstrated “none of the traits of controlled demolition,” is extremely problematic. Each argument the Guide presents is either false or misleading:

- **No puffs of smoke – False:** ejections of dust and debris are clearly visible in videos of Building 7’s collapse.[60]
- **No bangs/loud noises (I include these together because they are essentially the same argument) – False:** A very loud boom is heard as the building collapses, and there are testimonies of explosions occurring as WTC7 collapsed.[61] What’s more, physicist David Chandler has found evidence of explosions occurring right before the building starts to collapse.[62]
- **No flashes – Misleading:** While they do often occur, explosive flashes do not always appear in controlled demolitions.[63]

The Guide argues that the Twin Towers also did not exhibit any characteristics of controlled demolition. Admittedly, 9/11 Mysteries should have clarified that the Towers were not brought down in a conventional way. Showing how other structures are blown up with explosives is fine and good, but the film should have focused on the distinct characteristics of the collapses of the Towers and how these characteristics have only ever occurred in demolitions. The Towers did in fact exhibit all the conventional characteristics of a controlled demolition, with a few nonconventional characteristics as well. The main characteristics of demolition that the Towers exhibited were as follows:

- Sudden onset of collapse
- Straight down progress
- Total dismemberment of the structure
- Demolition rings
- Pulverization of concrete and other nonmetallic materials/Thick dust clouds
- Horizontal ejections
- Sounds produced by explosions

The fact of the matter is that all of these features have only ever occurred at the same time in a controlled demolition. No building exhibiting all these characteristics has ever not been a controlled demolition.

It is not necessary for the Towers to have come down in exactly the same manner as a classic demolition. That does appear to be the case for WTC7, but controlled demolitions can be set up in any way needed. That's why it's called "controlled" demolition. Although 9/11 Mysteries fails to adequately highlight this point, it still does not change the fact that the Guide's arguments do not conclusively disprove the demolition theory.

20:59 **The damage is not contained.** Even the windows are blown from neighborhood buildings.

21:07 **What kind of energy enabled this? Would fire hurl metal and concrete sideways into the air?**

In a controlled demolition, the damage **is** contained. Again, this is a contradiction of 9/11 Mysteries past and future "footprint" comments.

Consider this:

A building in the Netherlands that partially collapsed due to fire after seven hours of burning:



And a building in china that was demolished with explosives:



Which do you think looks more like the WTC?



21:15 Here, a **600,000-pound chunk of steel (twice the weight of a Boeing airliner)** was flung 400 feet, wedging itself deep into Three World Financial Center on Vesey Street.

Let's do some math.

World Trade Center buildings 1 and 2 used 100,000 tons of steel each.

<http://www.infoplease.com/spot/wtc1.html>

When we convert 100,000 tons to pounds, we get a figure of 200,000,000 pounds of steel per tower. If we then divide that figure by 110 (number of floors), we get 1,818,181.81 pounds of steel per floor. This means that 600,000 pounds of steel would be roughly 1/3 of the steel required for one entire floor. Does that really look like 1/3 of an entire floor? That would be 1/3 of all the steel from the core on that floor, 1/3 of all the supporting trusses on that floor and 1/3 of the outer perimeter columns. Granted, there was also steel on the roof and in the basements of each tower. However, this would not have much effect on our approximate figure since only minimal amounts of steel were used in the basements and on the top of the towers compared to the rest of the building.

Image -> http://www.911myths.com/assets/images/WFC3_close.jpg

21:31 A FEMA photographer taking pictures of Ground Zero wondered why so MANY steel beams were jutting from neighborhood buildings. **What shot pieces of the towers all the way across the street?**

Quite simply, the building collapsing.

Throughout the film, 9/11 Mysteries claims that a mix of thermite and demolition charges brought down all the buildings that collapsed that day.

For starters, thermite is not an explosive. Secondly, demolition cutter charges are designed to cut steel. They are not designed to "hurl" pieces of buildings across 300 feet. For this to have been caused by explosives, extremely high-powered explosives would need to be used in huge amounts.

We are talking about explosives bigger than truck bombs. An explosive with the force of 12-28 stories of steel collapsing would be needed for us to assume that explosives had a greater chance of causing this "ejection" effect than the building collapsing.

These devices would be so large that they could simply not be hidden in an office building without anybody noticing.

This far flung debris from the Twin Towers, although probably not weighing the 600,000 pounds that 9/11 Mysteries claims, was obviously quite heavy, and we

should still question why it and so many other pieces of steel were ejected so far across the city. The Guide asserts that in order for explosives to have caused this, they would have had to have been very large explosives, and therefore could not be hidden in the Towers without detection. What the Guide does not take into account is that the size of the explosives is not what is important. It's the amount of energy that the explosive can contain. It may be argued that the explosive has to be large to store a large amount of energy, but there are variations of explosives that can be formulated so that the energy is enormous while the explosive itself is small. Consider this argument from 911research:

One of the critiques of theories that [thermite was used](#) to destroy the World Trade Center skyscrapers asserts that thermite preparations don't have sufficient explosive power to account for the [observed features](#) of the buildings' destruction. This criticism seems to be uninformed by knowledge of some of the aluminothermic preparations known to exist -- particularly those being researched for military applications. The typical classroom demonstration of the thermite reaction is very pyrotechnic and heat-producing, but is not explosive. The reason for this is that the reaction rate is too slow to cause the rapid increase in pressure characteristic of a detonation, or sharp explosion. It's not for lack of energy: the energy density of thermite ($\text{Al} + \text{Fe}_2\text{O}_3$) is comparable to TNT on a weight basis, and three times as high on a volumetric basis. In contrast to the slow-burning behavior of low-tech thermite preparations, various engineered forms of aluminothermic materials apparently have explosive power resembling conventional high explosives while retaining higher energy densities.[66]

So, contrary to what the Guide claims, variations of thermite could very well have caused the observed characteristics of the Tower's destruction, and could also have been hidden without detection. Many debunkers have argued that the "peeling out" of the Towers' perimeter walls accounted for this far-flung debris, in that the walls fell intact and then broke apart when they hit the ground. However, numerous videos of the Towers' collapses show that several isolated pieces of steel were ejected very far outside the buildings' footprints. A good example of this is an isolated piece of steel that can be seen flying towards WTC7 as WTC1 collapsed.



As you can see, this is not simply a wall peeling out. It is an isolated piece of steel that looks to be one or more wall units. Calculations by physicist David Chandler show that this particular piece of steel was travelling at about 35 meters per second, which is 78 miles per hour.[67] Another scientific critic of the official story who has emphasized this feature as especially compelling evidence is Dwain Deets, the former director of the research engineering division at NASA's Dryden Flight Research Center. The "massive structural members being hurled horizontally," he has said, is one of the factors that "leave no doubt" in his mind that "explosives were involved." [68] Deets' point is well grounded, because the NFPA 921 guide states that investigators should look for evidence of explosives whenever there is "high-order damage," which is defined thus:

High-order damage is characterized by shattering of the structure, producing small, pulverized debris. Walls, roofs, and structural members are splintered or shattered, with the building completely demolished. Debris is thrown great distances, possibly hundreds of feet.[69]

The first two sentences in this description fully apply to WTC7, and the entire passage would apply to the Twin Towers. In NIST's final report on the collapse of WTC7, they had this to say about the debris being ejected from the Twin Towers:

[S]ome fragments were forcibly ejected and traveled distances up to hundreds of meters.[70]

Notice that here NIST is apparently admitting that sections of the steel and other debris was thrown at least 650 feet (because "hundreds of meters" would be at least 200 meters, which would be about 650 feet).

These are very critical points. If the Towers truly were gravity driven collapses where all the force was acting vertically downward, where did all the horizontal force come from to propel the steel hundreds of feet away from the Towers?

22:30 So much to be explained. **Why did the South Tower fall first, when it was the second tower to be hit?**

There is far more to be considered than which tower was hit first.

The NIST report Finding 58 explains what these other factors are.

<http://wtc.nist.gov/pubs/NCSTAR1-6ExecutiveSummary.pdf>

“Finding 58: The time it took for each WTC tower to collapse was due primarily to the differences in structural damage, the time it took the fires to travel from the impact area across the floors and core to critical locations, and the time it took to weaken the core and exterior columns. WTC 2 had asymmetric structural damage to the core including the severing of a corner core column and WTC 1 had more symmetrical damage. The fires in WTC 2 reached the east side of the building more quickly, within 10 to 20 minutes, than the 50 to 60 minutes it took the fires in WTC 1 to reach the south side.”

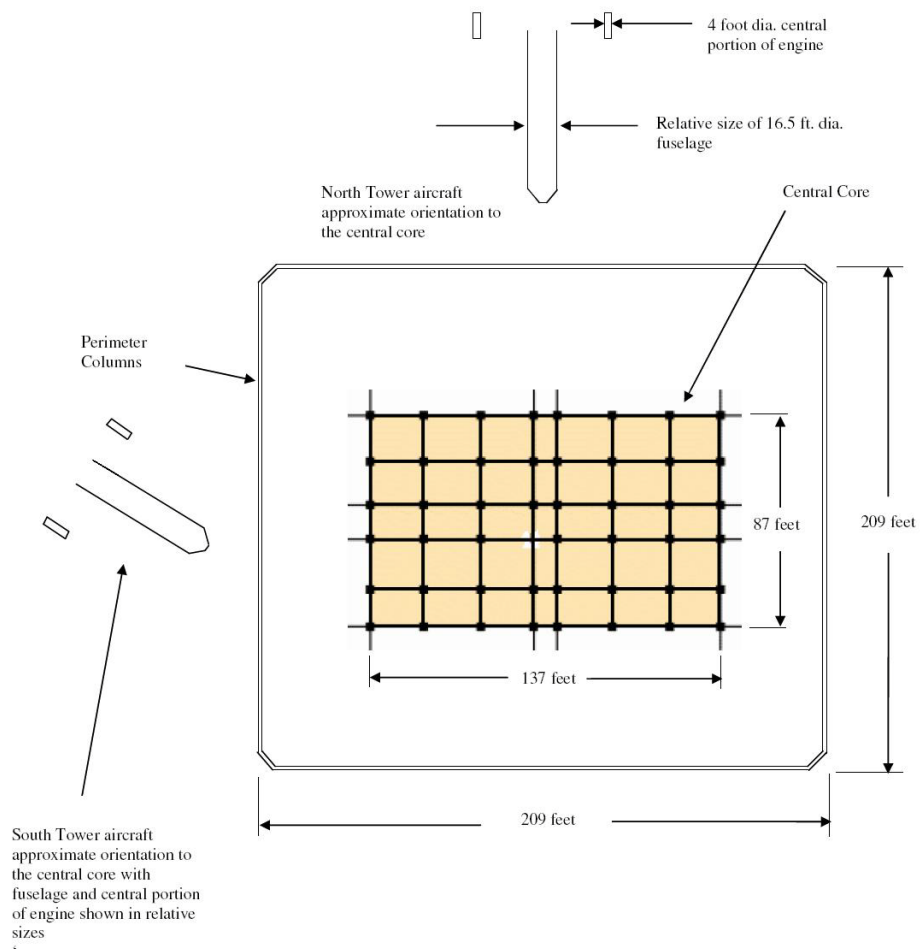
9/11 Mysteries only takes one aspect of this situation into account. Along with the facts listed above, weight also must be taken into account. The section of WTC2 that was above the impact zone was far larger than the section of WTC1 that was above the impact zone. As a result, WTC2 had much more weight (28 stories) to support than WTC1 (12 stories).

The plane that hit WTC2 was also travelling 100 mph faster. This means more dislodged fireproofing and more damage from the kinetic energy of the impact.

There are other factors that the Guide does not take into account. First off, videos clearly show that far more jet fuel exploded outside of the South Tower than the North Tower. This would indicate that the fires were less severe in the South Tower, and videos and photographs taken before the South Tower collapsed show that the fires were significantly weakening, whereas the fires in the North Tower appeared to be getting more severe. Although NIST argues that it took less time for the fires in WTC2 to reach the area of failure, the fires were clearly more severe in WTC1. It's interesting to note that, by citing this passage from the NIST report, the Guide demonstrates that both of the Towers essentially burned for only 45 minutes in the areas of failure. Therefore, we can conclude that both Towers burned for less than an hour before collapsing!

NIST also argues that differences in the structural damage played a role in the order of collapses. In NIST's report, they argue that 6 core columns in WTC1 were severed and 10 core columns were severed in WTC2. However, this assertion is contradicted by the visual evidence of both of the initial plane impacts. Simple analysis shows that the South Tower could not possibly have had 10 of its core columns severed. Flight 11 hit the North Tower straight on, meaning that it would

have been headed directly for the core. Flight 175, however, hit the South Tower at an angle, with the result that the plane's right engine exited the building with little obstruction. In fact, only the plane's left wing and engine would have come into direct contact with the core. But the wing, being made of aluminum and having already encountered perimeter columns, would probably have not been able to sever many of the much thicker core columns. NIST itself has stated that an engine could probably only sever one column at most. What's more, the columns in the Towers became stronger at the lower levels, as they had more weight to support above. The columns at the South Tower's 80th floor, which was the impact zone, would have been significantly stronger than the columns at the North Tower's 95th floor impact zone.



22:40 Watch the top third of Tower 2 leaning outward, **about to topple**. Then -- suddenly -- it **disintegrates in mid-air**. What causes this giant slab of steel and concrete **to turn into dust before our eyes**?

For this part of the WTC2 to topple off to the sides, a force would have needed to act upon the top section of the building to push it over. The only force that was acting on this upper section of the building was gravity. In other words, straight down.

What happened, in reality, had nothing to do with “disintegrating” or “pulverizing”. Those descriptors certainly sound dramatic, but they are simply not true.

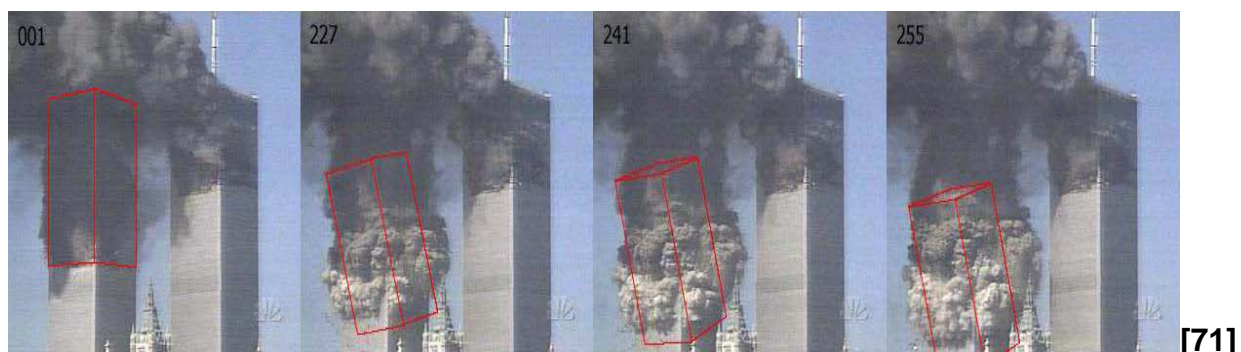
When the upper section of the building collapsed, it began at a 23° angle facing toward the south-east. This was because the east face perimeter columns were pulled in further, and at a lower part of the building, than the west face perimeter columns.

However, as the collapse progressed, the tilt of the building corrected itself. This was due to the west face collapsing enough to correct this tilt. For an explanation on tilt correction, please see this section of “Screw 9/11 Mysteries” by following the following link.

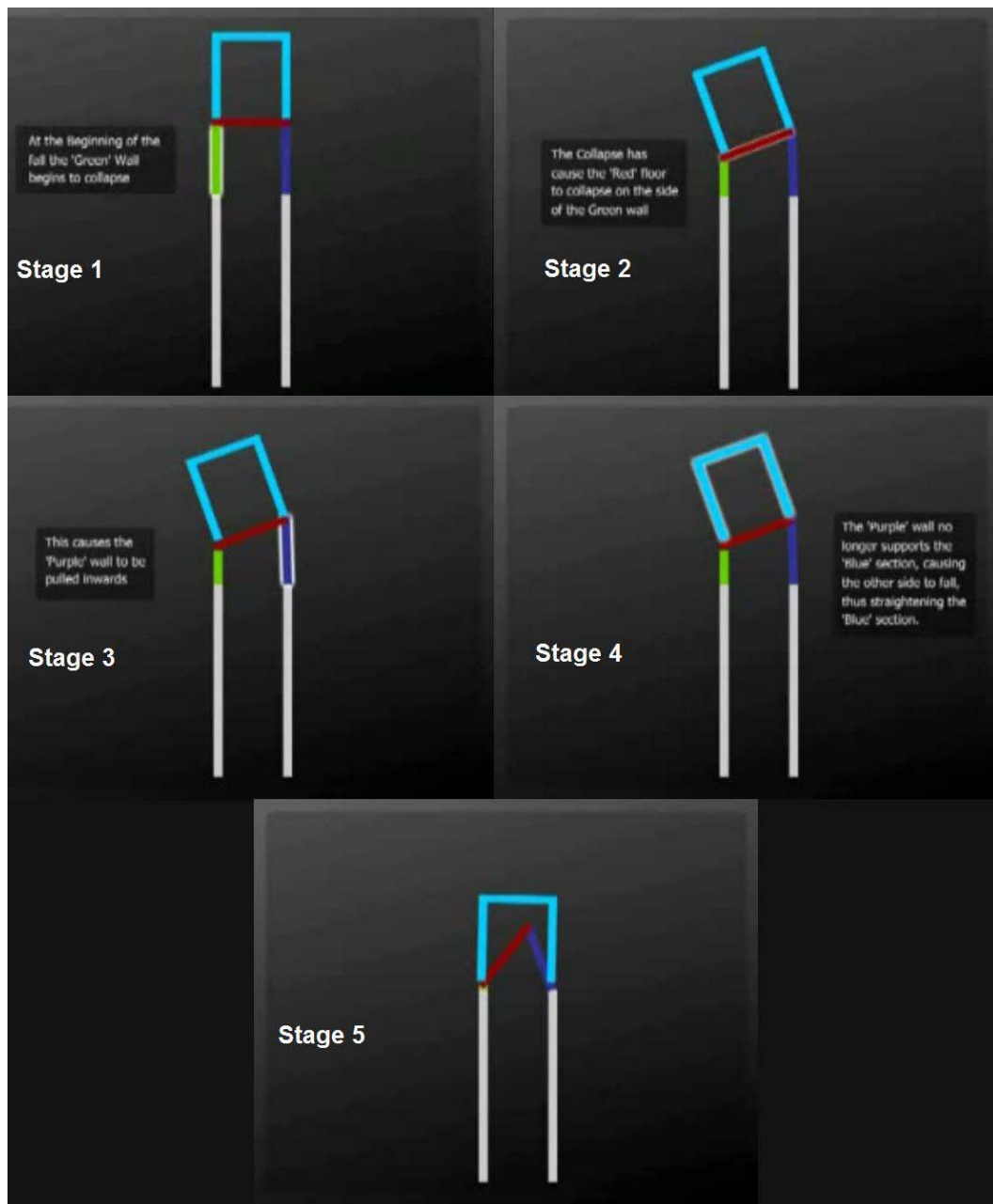
<http://video.google.com/videoplay?docid=-6243624912447824934#35m49s>

This is by far one of the most incorrect assertions the Guide makes. The Guide claims that a force would have had to have been acting on the upper section to push it over and the only force was gravity. This implies there was no horizontal force acting on the section to cause it to topple. However, the upper section was already toppling, and toppling produces a horizontal force that increases as the center of gravity is displaced laterally from the fulcrum.

The Guide's next absurd claim is that the upper section was not disintegrating. This is absolutely false. Videos and photographs show that the upper section of WTC2 must have been disintegrating. Otherwise, the top section would have extended far into parts of the building that have clearly not yet been affected by the collapse.



The most ridiculous claim the Guide makes here is that the tilt actually “corrected itself.” Screw 9/11 Mysteries presents us with a visual model of how this alleged correcting of the tilt occurred.



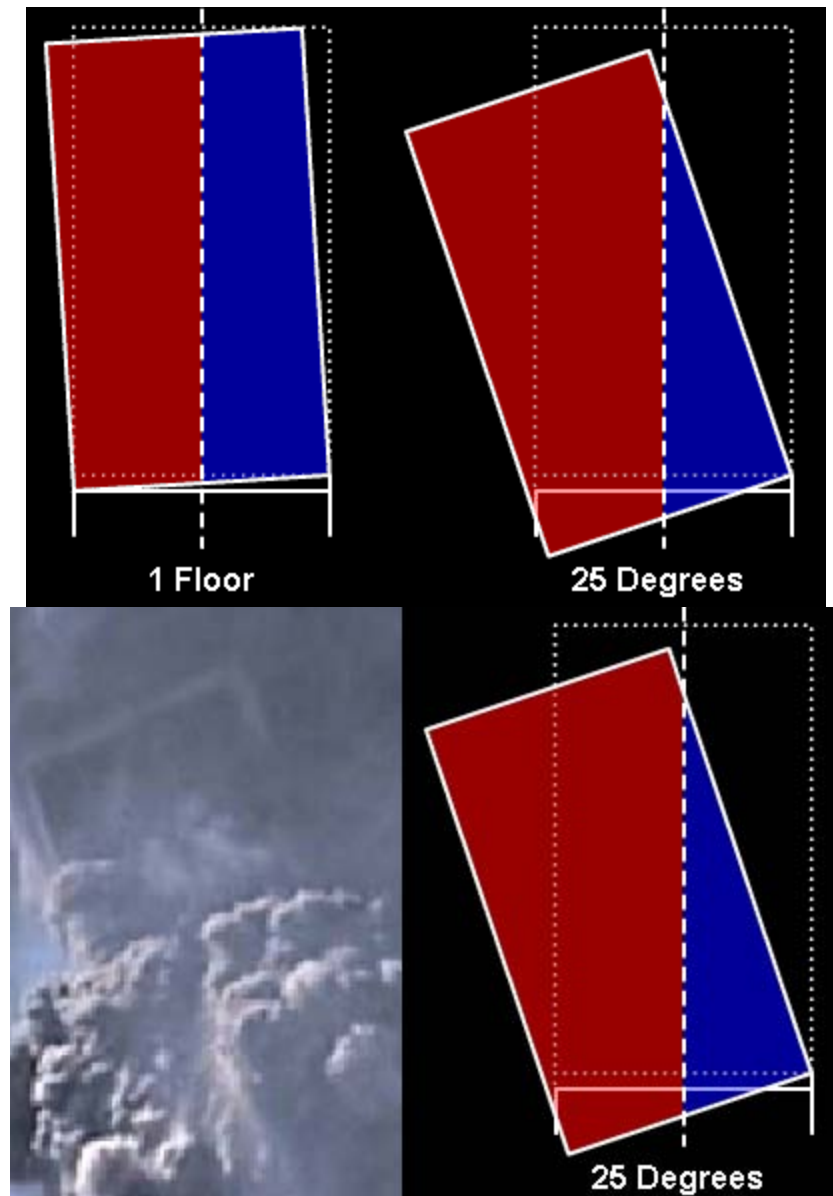
According to Screw 9/11 Mysteries, the tilt correction occurred in five stages:

1. At the beginning of the fall, the “Green” wall begins to collapse.
2. The collapse has caused the “Red” floor to collapse on the side of the Green wall.
3. This causes the “Purple” wall to be pulled inwards.
4. The Purple wall no longer supports the “Blue” section, causing the other side to fall, thus straightening the Blue section.
5. The collapse then progresses vertically.

This scenario is completely implausible for several reasons. First off, the videos totally contrast with this description of the motion of the top. The upper section of WTC2 was still visible at least five seconds into the collapse, and showed absolutely no signs of straightening itself out, as the previously shown stills demonstrated. True, the upper section did begin to tilt at an accelerating rate and then slowed, but it never appeared to significantly change direction. Secondly, the film's scenario shows the west side of the upper section still connected to the lower section (or at least lined up with it). But as the videos show, the top and bottom sections were disconnected -- i.e., there was no crush zone. The upper section did not rotate about fulcrum; rather it rotated freely about a changing axis. In fact, based on the motion of the tipping top, the west side of the lower section would have essentially been unscathed by the top. Why then, why was it erased like the rest of the Tower's base in such a systematic top-down fashion?



Very little force would have been acting on the west side, but an enormous amount of force would have been acting on the east side. At an angle of 23° to 25°, more than three times as much weight would have been acting on one side of the building compared to the other side.



It's important to note that once the top of the Tower started its vertical plunge, its rate of rotation slowed down. This can only be explained by the disintegration of the upper section, which would have destroyed its moment of inertia. The top of the South Tower clearly should have tilted.

23:07 Watch both buildings collapsing straight down – **directly INTO the path of MOST RESISTANCE** – which is all the floors and all the mass of the building itself.

As the beams sagged and pulled the exterior columns inwards, the only path was straight downwards. No force other than gravity was acting on the top of either tower. Due to the sheer size and weight of the upper sections of the towers (WTC1 – 12 floors, WTC2 – 28 floors), the static lower sections were unable to withstand the force of the building collapsing.

For the towers to have collapsed sideways, a force would have to be acting on them from the sides. There was none.

http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

“In other words, the momentum (which equals mass times velocity) of the 12 to 28 stories (WTC 1 and WTC 2, respectively) falling on the supporting structure below (which was designed to support only the static weight of the floors above and not any dynamic effects due to the downward momentum) so greatly exceeded the strength capacity of the structure below that it (the structure below) was unable to stop or even to slow the falling mass. The downward momentum felt by each successive lower floor was even larger due to the increasing mass.”

As I already demonstrated, the toppling of the upper section of the South Tower should have imparted a horizontal force on the structure. This section of NIST’s FAQ is easily refuted by 911research:

NIST's assertion that the Tower's intact structure was "unable to stop or even to slow the falling mass" is absurd:

- It requires us to believe that the massive steel frames of the towers provided no more resistance to falling rubble than air.
- It ignores the fact that most of the rubble fell outside the towers' footprints, and hence could not contribute to crushing.
- It is unsupported by any calculation or logical argument.[72]

23:25 The World Trade Center Towers came down in approximately 10 seconds. Seismic data from Columbia University puts the **North Tower collapse at about 8 seconds** and the **South Tower at approximately 10**. Lynn Simpson, a survivor from the 89th floor of the North Tower, describes the sight:

These figures are incorrect, to say the least. For the North Tower to collapse in 8 seconds there would need to have been some kind of vacuum on site. We do not know about you guys but we did not see any giant vacuum present at either tower.

If we look at some real data, the collapse times are quite different than those alleged by 9/11 Mysteries. Again, we will cite the official story which 9/11 Mysteries seems to have ignored.
http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

“NIST estimated the elapsed times for the **first exterior panels** to strike the ground after the collapse initiated in each of the towers to be approximately 11 seconds for WTC 1 and approximately 9 seconds for WTC 2. These elapsed times were based on: (1) precise timing of the initiation of collapse from video evidence, and (2) ground motion (seismic) signals recorded at Palisades, N.Y., that also were precisely time-calibrated for wave transmission times from lower Manhattan (see NCSTAR 1-5A).”

So, instead of just grabbing some recordings from one source (Columbia University) like 9/11 Mysteries did, NIST actually did some valid research and calculated the collapse times to be much longer than 9/11 Mysteries did. NIST’s findings reveal that they calculated the time it took the **first exterior panels** to strike the ground after collapse initiation was 9 seconds (WTC2), and 11 seconds (WTC1).

Images and video of the collapse of both towers show that the collapse of the entire structure finished long after the first exterior panels had struck the ground.

The Columbia University data is most likely incorrect.[73] Careful measurements show that the time it took for each of Towers to collapse was around 15 seconds, rather than 10 seconds.[74]

24:01 Ten seconds. These are 110 story buildings coming to earth at free fall speed, the rate at which an object falls through air. The lower floors would need to give way completely as the floors above them fell.

More narration that was removed from the transcript.

Free-fall? If the towers fell at free-fall speed, why is the debris falling faster than the building? The Twin Towers did not fall at free fall speeds. The following images should be sufficient to prove this.

Image -> <http://images.911mysteriesguide.com/freefall.jpg>

Image -> <http://images.911mysteriesguide.com/freefall2.jpg>

Image -> <http://images.911mysteriesguide.com/freefall3.jpg>

So if the buildings were travelling at free-fall speeds, then this debris must have been travelling much, much faster than free fall. How is that possible?

In fact, videos show that some of the steel debris appears to have been falling somewhat faster than free fall.[75] As for what could have caused this, explosives could very well have caused the steel to fall faster than free fall through the air.

24:23 A 10-second collapse means the upper floors encountered no resistance from the undamaged floors beneath them. Watch the demolition wave rushing straight down.

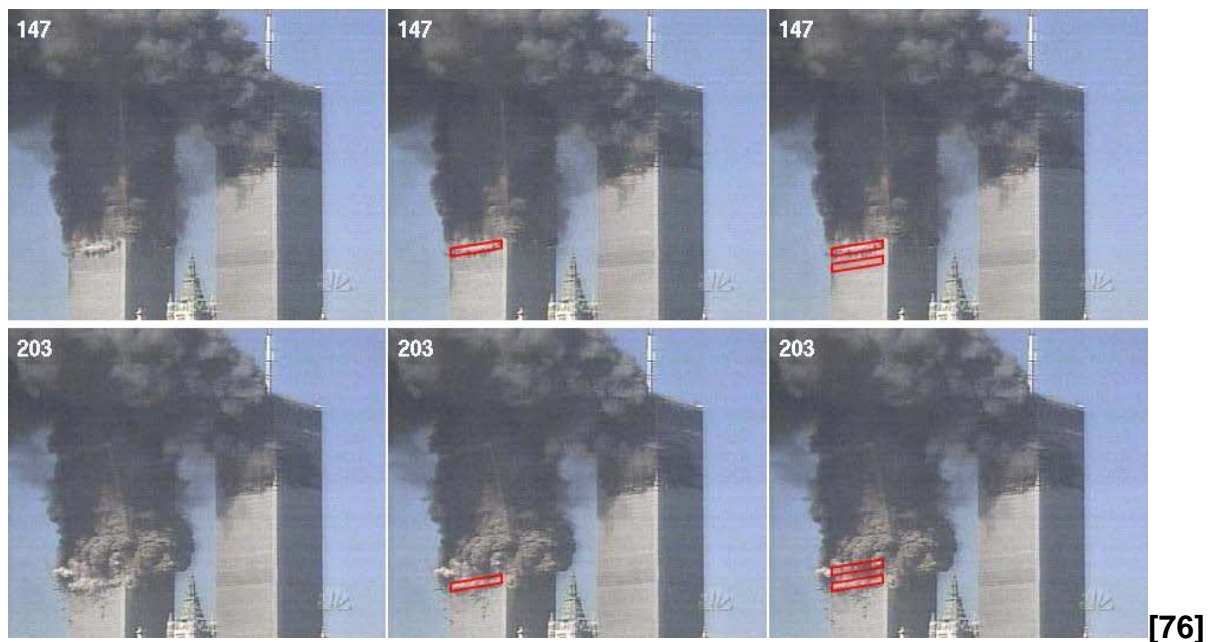
That would imply free-fall. We have demonstrated in this section how ridiculous that assertion is.

The upper floors' downward momentum was larger than the resistance being provided by the lower floors. In other words, the lower structure was not strong enough to slow the collapse.

9/11 Mysteries claims that the Twin Towers had a "demolition wave". This would require thousands of explosives all perfectly timed to detonate in a wave style, which would require explosives on every single floor.

The Guide acts as if the floors were the only part of the structures that would have offered resistance, completely ignoring the fact that the Towers' support columns would also have provided significant resistance.

Explosives would not be required on every floor to produce these waves. The videos indicate that the waves of ejections appeared to be coming out of every few floors of the buildings.



Frame 147 shows a row of dust ejecting right across the east face at the 79th floor. Frame 203 shows a row of dust ejecting right across the east face at the 75th floor. It has been claimed that the explosions of dust that span the east face of the tower were caused by air being forced from the windows as each of the floors above collapsed. This explanation is obviously incorrect. If it was correct, such lines of dust would have been expelled from the windows of each floor in succession. That is, we would have seen such lines of dust expelled from floors 79, 78, 77, 76 and 75 in succession, but what we observe is an explosion of dust at floor 79, no new clouds of dust for a few floors, then another explosion of dust

at floor 75. The Guide seems to think that this type of detonation sequence would have been highly improbable to achieve in a demolition.

Conventional demolitions do not use “waves”. The amount of explosives required for a wave far exceeds the amount required for a simple implosion. Later on in this guide you will learn (using examples) how a conventional demolition could not have been performed in the timeframe offered. A demolition wave is far more absurd still.

Explosives on every floor and no one noticed? That is extremely hard to believe, especially without evidence.

Contrary to what the Guide claims, explosives can be set up in any way they need to be. The Towers were far from conventional demolitions, and the Guide provides no valid argument that proves explosives could not have been set up to produce a “wave.”

24:40 Here the **South Tower is half its original height, but wreckage from the upper collapse has not yet fallen this far.** We are watching a **demolition moving faster than gravity itself...** a building bursting into powder from top to bottom.

First, we will deal with the wreckage claim put forward by 9/11 Mysteries. They use this photograph to demonstrate their point.

Image -> <http://911research.wtc7.net/wtc/evidence/photos/docs/site1106.jpg>

A closer look at this photograph shows us that several pieces of debris are, in fact, ahead of the collapse.

The creators of 9/11 Mysteries point to the aluminum facades above the collapse as evidence that the building is falling faster than free fall.

Aluminum facades are lightweight and shaped in a way that causes them to be far more susceptible to wind resistance. If we look at the heavier steel though, there are large chunks of it well below the collapsing section of the building.

By examining a series of mid-collapse photographs and noting the debris that is falling much faster than the building itself, we can conclude that the building was not falling “faster than gravity itself”.

Actually, what we can see in the videos and photographs is that, while the debris is outpacing the collapse of the buildings, the wave of ejections coming from the buildings appears to be keeping up with the falling debris. Careful measurements by David Chandler confirm this.[77] Chandler also has shown that the rate the ejections progressed down the North Tower appeared to be at the same speed as the initial collapse of the upper section of the building.[78]

25:23 Eric Hufschmid, author of the book “Painful Questions,” **is a metal-cutting software engineer.**

He is also a holocaust denier.

We advise you all to look at this video.

<http://video.google.com.au/videoplay?docid=7501020220921158523>

Eric Hufschmid says nothing about his supposed “metal cutting” experience. This would be critical to his argument, and he fails to mention it? That is a bit odd. Did he just forget to mention the only shred of credibility he has?

He claims he is a “software engineer.” How is a software engineer qualified to talk about structural failure? We think we will trust the hundreds of structural engineers who support the official story over a software engineer.

25:23 Eric Hufschmid: “The floors of the World Trade Center towers were a three-dimensional mesh of steel beams. You have to keep in mind now, the floor is about an acre in size -- there are thousands of joints all over it. **In order for the floor to fall down, thousands of joints would have to break simultaneously.** So then, if you look at the speed at which this came down -- less than ten seconds -- you blink your eye and thousand of joints just popped somehow. **The only way you can explain that is with explosives.** They had to have **had explosives placed all over the floors at the primary joints**, and then that would explain how all of the joints broke at such a rapid rate. The debris was crashing from one floor to the next. **Debris cannot crash through steel and concrete floors as fast as it falls through the air --** and there was no slowing. **Explosives had to be breaking the joints ahead of the falling rubble, which is why the top half starts off collapsing slowly and then it starts picking up speed...**”

It would be interesting to know where Eric's information comes from, particularly in light of the fact that he has no structural engineering experience, no physics experience and no demolitions experience.

Me thinks the man doth protest too much. The Guide spends quite a lot of time criticizing Hufschmid's character and credibility, and does a poorer job at trying to refute his arguments.

The joints we are told about were nowhere near strong enough to support the force of 12 and 28 floors falling onto them. Eric Hufschmid is arguing against the “pancake initiation” theory. In other words, Hufschmid thinks the official story states that the collapse was started by one collapsing floor. The official story does not say this at all. Hufschmid is using a straw man argument to prove his point.

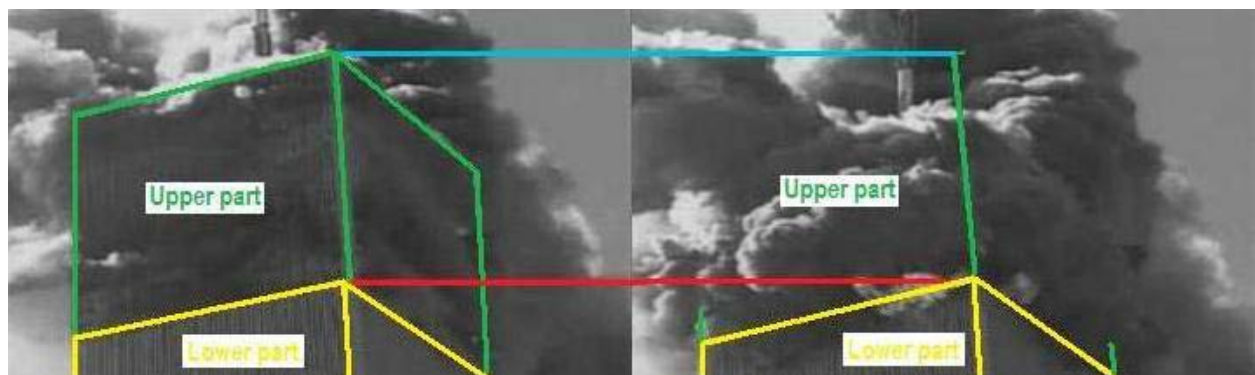
Hufschmid makes the assertion that the debris is crashing though steel at the same rate that it would fall through air. Quite simply, the steel was falling faster through air than it was through the building. Please see the previous information on “free-fall” for more information.

As I have already shown, the fact that the wave of ejections was travelling at about the same rate as the falling debris indicates that the interior was collapsing as fast as the exterior. By failing to acknowledge this, the Guide also fails to address two of the main points Hufschmid makes:

- How could so many structural connections have broken so rapidly without the involvement of explosives?
- Once the Tower began to come down, how could rubble falling through intact structure have descended as fast as rubble falling through the air without the involvement of explosives?

Due to the transfer of momentum, the buildings could not have slowed down during the collapse. In fact, it caused the collapse to accelerate.

As I previously demonstrated, the upper section of WTC2 was apparently disintegrating as it collapsed, with the lower section being unaffected. This also appears to have happened in the case of WTC1.



Given the fact that each of the upper sections were disintegrating as they collapsed, it is difficult to imagine that there would have been very much momentum to transfer.

27:04 If you were to drop a billiard ball from the top of the Twin Towers, it would hit the ground in just over 9 seconds, the **average time it took for the towers to fall**. Helped by gravity and falling through air, the ball **will GAIN SPEED**.

The average time it took for the towers to fall, according to reliable sources, is over 10 seconds. Not “just over 9”. 9/11 Mysteries claims, “just **over 9 seconds**” was the average time it took the towers to fall. That would not even be true to the 8 and 10 second times they provided us. It would be dead on 9 seconds. Nice math.

A transfer in momentum from floor to floor would also cause the collapse to speed up.

True, a pancake collapse could gain speed, but that is assuming that all the mass above stays well aligned with the mass below. A simplified model done by Jim Hoffman shows that, if this were the case, the fall times could have been within 11 to 13 seconds. Adding in more realistic parameters to this simulation, where the debris was clearly being thrown outside the buildings' footprints, the fall times increase to nearly 20 seconds.[79]

27:22 The calculation for a “pure” pancake collapse of 110 stories, with each floor pulverizing to get out of the way, is 96 seconds. In the real world, with the floors creating resistance, a pancake collapse would LOSE speed – never would it GAIN speed.

The 96-second collapse time is based on every single floor in the towers pancaking. The evidence available indicates that the Twin Towers, for the most part, did not collapse in a progressive fashion. This renders 9/11 Mysteries' argument a straw man fallacy.

This collapse time also suggests that every floor in the tower should come to a complete halt before the next one falls. This is what Dr. Frank Greening has to say about this.

http://www.911myths.com/Energy_Transfer_Addendum.pdf

“Thus I conclude that inclusion in my calculation of the time spent in crushing a 4 inch layer of concrete would add no more than 1 millisecond per crushed floor, or increase the calculated total collapse time of a Twin Tower by only about 0.1 seconds!”

The official story disagrees with the “pure pancake” theory. The collapse was initiated when the upper floors collapsed. Therefore, ignoring the fact that the top 28 floors (WTC2) did not pancake has already thrown Judy Wood's calculations way off.

9/11 Mysteries and Judy Wood ignore the shift of momentum during collapse, a very critical thing to ignore.

For these reasons, Judy Wood's calculations cannot be seen as accurate or even close to being accurate.

Judy Wood's calculations are clearly incorrect. However, more detailed calculations have been done by mathematician Kenneth Kuttler. Kuttler's calculations (which take Dr. Greening's calculations into account) show that the overall fall times of the Towers should have exceeded 25 seconds, which would be consistent with Jim Hoffman's model.

Clearly, fall times of over 25 seconds are expected with reasonable assumptions, yet the observed fall time for the Tower is less than that.[80]

Analyses done show that the fall rate of just the upper sections of the Towers would defy physics. In the case of WTC2, the upper section initially rotated at an angle of 23° to 25°. This rotation lasted for about 2.5 seconds before it abruptly

stopped. However, within that 2.5 seconds, the upper section had not yet begun to vertically descend, with the result the west side of the Tower's roof was still at essentially the same height. Timing the vertical descent of the upper section at that point shows that, from the time it took the upper section of WTC2 to collapse down to the 78th floor, the top of the South Tower collapsed in about 5 seconds. The upper section of WTC2, 32 floors, was approximately 384 feet (12 feet per story times 32 stories). A free fall time from 384 feet would be approximately 4.89 seconds.

$$\text{Times squared} = (\text{Distance} \times 2) / 32$$

$$24 = 768 / 32$$

$$4.89 \text{ seconds}$$

Because the upper section of WTC2 collapsed in about 5 seconds, the top of the building therefore fell at almost the rate of free fall.[81]

As for WTC1, David Chandler has shown that the upper section of the building actually accelerated downwards at 2/3 the rate of gravity.[82] In other words, the upper section of the building collapsed into the lower section, and not only did it not slow down, it sped up! This would be impossible without an external force removing the column strength.[83] Ultimately the overall speed of the collapses would have been impossible if they truly were gravity driven collapses.

At this point, I will not address the next four sections of the 9/11 Mysteries Guide, as I believe that they are four very flawed sections of 9/11 Mysteries and are rightfully debunked to an extent: Pre-Collapse Sub-Basement Explosions[84], Pre-Collapse Interior Blasts[85], Pre-Collapse Ground Level Explosions[86], Pre-And Mid-Collapse Explosions[87]

Squibs

35:45 Let's look carefully at the collapse itself. Notice the **puffs of concrete issuing from the sides of the building well ahead of the collapse wave**. Called "**squibs**" in demolition language, **these are actual explosives – charges firing visibly through the exterior as gravity pulls the building down**.

If you examine the available video of these puffs of concrete, you should take careful note of the manner in which they exit the building.

These puffs of dust and concrete happen in the reverse order of explosives. They exit the building and then increase in size over a short period. Almost as if they are being "squirted" out

of the building.

As we stated before, explosives work the opposite way. The strongest point of an explosion is detonation. The dust cloud would then linger and perhaps disperse. It never increases its explosive strength over time.

This is not strictly true. There are varying speeds that squibs can be ejected from a building, depending on how the explosives produce the gases they eject.[88] What's more, David Chandler has demonstrated that some of the ejections from the Towers did shoot out in the fashion described by the Guide, starting out strong and then losing speed.[89]

As the buildings began to fall, a build-up of pressure caused a compression of air between floors. This pushed dust, smoke, debris and concrete out of small sections of the buildings side. NIST comments on this in their FAQ:

http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

“As stated in Section 6.14.4 of NIST NCSTAR 1, the falling mass of the building compressed the air ahead of it—much like the action of a piston—forcing smoke and debris out the windows as the stories below failed sequentially.

These puffs were observed at many locations as the towers collapsed. In all cases, they had the appearance of jets of gas being pushed from the building through windows or between columns on the mechanical floors. Such jets are expected since the air inside the building is compressed as the tower falls and must flow somewhere as the pressure builds. It is significant that similar “puffs” were observed numerous times on the fire floors in both towers prior to their collapses, perhaps due to falling walls or portions of a floor. Puffs from WTC 1 were even observed when WTC 2 was struck by the aircraft. These observations confirm that even minor overpressures were transmitted through the towers and forced smoke and debris from the building.”

911research lists several problems with this explanation:

- The squibs contain thick dust of a light color, apparently from crushed concrete and gypsum. But these materials would not have been crushed until the pancaking floors above impacted the floor emitting the squib. Thus the dust would not be produced until the air was already squeezed out, so there was no source of the dust for the squib.
- The squibs emerge from the facade 10 to 20 floors below the exploding rubble cloud inside of which the tower is disintegrating. The thick clouds appear to contain the pulverized concrete of the floor slabs, which was the only concrete component of the tower. But the piston theory requires that the floors have already pancaked down to the level of the squib, making them unavailable for the production of the concrete dust more than 10 floors above.
- The piston theory requires a rather orderly pancaking of the floor diaphragms within the intact sleeve of the perimeter wall. Such a process should have left a stack of floor diaphragms at the tower's base at the end of the collapse. But there was no such stack. In fact, it is difficult to find recognizable pieces of floor slabs of any size in Ground Zero photographs.

- The North Tower exhibits three distinct sets of squibs at different elevations of the building. Each set is visible as two distinct squibs on the same floor, one emerging from about the horizontal center of each of the tower's two visible faces. This pattern is far too focused and symmetric to be explained by the piston theory, which would produce similar pressures across each floor and over successive floors.
- The pancaking of floors within the perimeter wall would have created underpressures in the region above the top pancaking floor. But we seen no evidence of dust being sucked back into the tower.[90]

What's more, Dr. Crockett Grabbe, a physicist from the University of Iowa, has calculated that the horizontal ejection rate of the squibs is disproportional to the vertical collapse rate:

The video frame in Figure 4 of the World Trade Center North Tower taken by KTLA channel 5 news shows a "squib" -- a line of ejecting material from the tower -- right before it collapsed. Such squib ejections are driven by massive overpressure inside the building relative to the atmospheric pressure outside, and that overpressure is created by explosions... The one displayed as Figure 4 shows ejecting material (bits of material large enough to have little air resistance) streaming out of the North Tower, which has traveled a distance from the tower in the horizontal direction, whereas the distance it has descended in the vertical direction because of gravitation pull is small.



Note the quantitative information that can be gathered from the ejection photograph in Figure 4. We can estimate that, at the front end, the ejecting plume has apparently fallen no more than roughly 3 feet (an estimate that might have up to a factor of 2 in error), whereas the horizontal distance of the front from building is about 1/3 the width of the North Tower, or about 70 feet. If we neglect air friction resistance over the length of the streamer, from fall distance $s=0.5gt^2$, where $g=32$ feet/sec² is the gravitational acceleration, we estimate 0.43 sec as the time since the front end first ejected from the building. That means that material in that squib is traveling

horizontally at roughly 163 feet/sec, which means the squibs are effectively "bullets" of bits of material produced by the explosions.[91]

We can confirm that air was moving through the towers moments before collapse by examining the following eyewitness accounts.

http://www.acfd.com/miracle_of_ladder_company_6.htm

Matt Komorowski: "The first thing I really felt was the incredible rush of air at my back. And maybe I felt it before everybody else, because I was the last guy."

Stone Phillips: "Like a gust of wind, behind you."

Matt Komorowski: "Gust of wind. Wind tunnel. It was the most incredible push at your back, that you can feel."

And from a different source.

<http://transcripts.cnn.com/TRANSCRIPTS/0209/07/pitn.00.html>

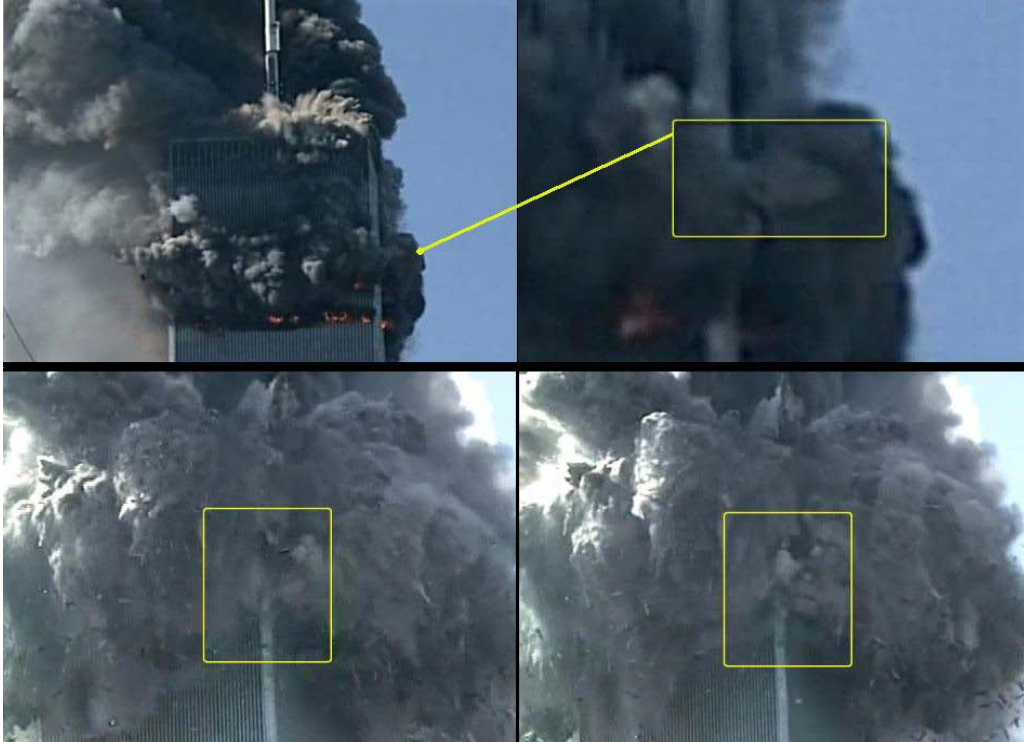
David Lim: What I remember the most was the wind. It created almost like a hurricane-type force and actually pushed one of the firemen right by me.

Mike Meldrum: I was flown down a flight of stairs, a little groggy for a while. I noticed somebody on a half landing just up from me, a few stairs and I thought it was one of our guys and it was David Lim."

This argument is highly misleading. Explosives can also displace large amounts of air very forcefully.

In every controlled demolition that has ever been performed, large amounts of explosives have been placed on almost every single floor. When a shaped charge is detonated, structural damage is immediately visible. However, at the World Trade Center, these alleged explosions appear to be causing no damage to the building at all. The damage is clearly being caused by the falling mass.

This is false. Analyses of the videos by David Chandler show that some of these ejections are coming from the steel corner columns of the building, meaning that they cannot be the result of air squeezed out of windows.[92]



So yes, many of these ejections do appear to be causing structural damage to the exterior of the building. It's interesting to note that, like the outer core columns, the corner perimeter columns would be key sections of the buildings that would need to be removed, due to the fact that they connect the adjacent wall assemblies and give the buildings three-dimensional stability. If the corner perimeter columns were removed, this could account for why many sections of the perimeter walls were ejected so easily from the Towers. What's more, at least one squib occurred right before the upper section of the North Tower began to collapse, and it occurred on a floor with no fire. Therefore, the falling mass cannot have caused it because the mass was not falling yet.[93]

These "squibs" also appear to be minimal in number and none are visible at the impact point. There is, however, ample evidence to suggest that the collapse of both towers was caused by the sagging trusses pulling the perimeter columns inwards.

The squibs were not "minimal in number." Several ejections can be seen racing down the faces of both Towers. These isolated ejections were most likely mistimed explosives that detonated too early in the demolition.

So we are left with: a collapse that was not initiated by explosives, puffs of air that look nothing like explosions and aren't causing any visible structural damage; and explanations for the cause of these puffs of air and debris. Things do not look good for the "puffs = explosives" case right now.

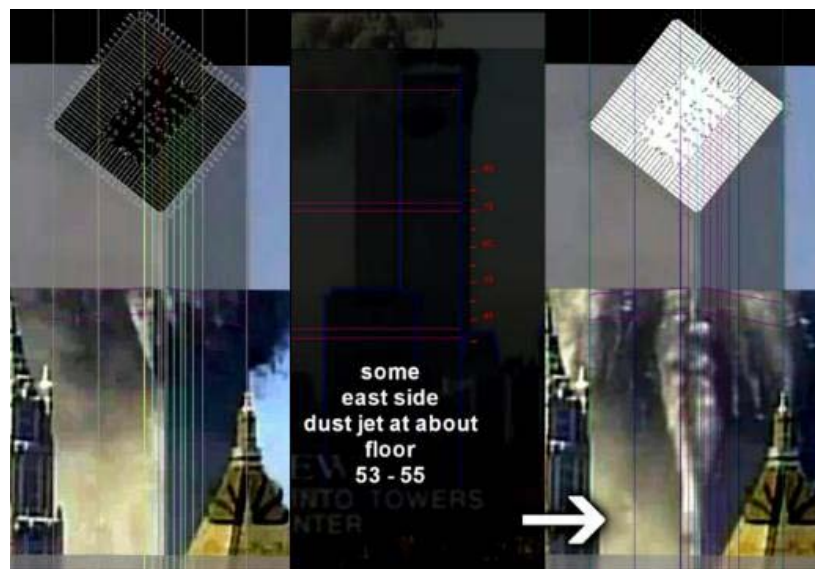
To the contrary, things do not look particularly good for any theory of a “natural collapse.”

37:10 The Twin Towers each consisted of three multi-story buildings set on top of one another. To sustain the weight of so many floors, the “sky lobbies” had to be extra-heavily reinforced.

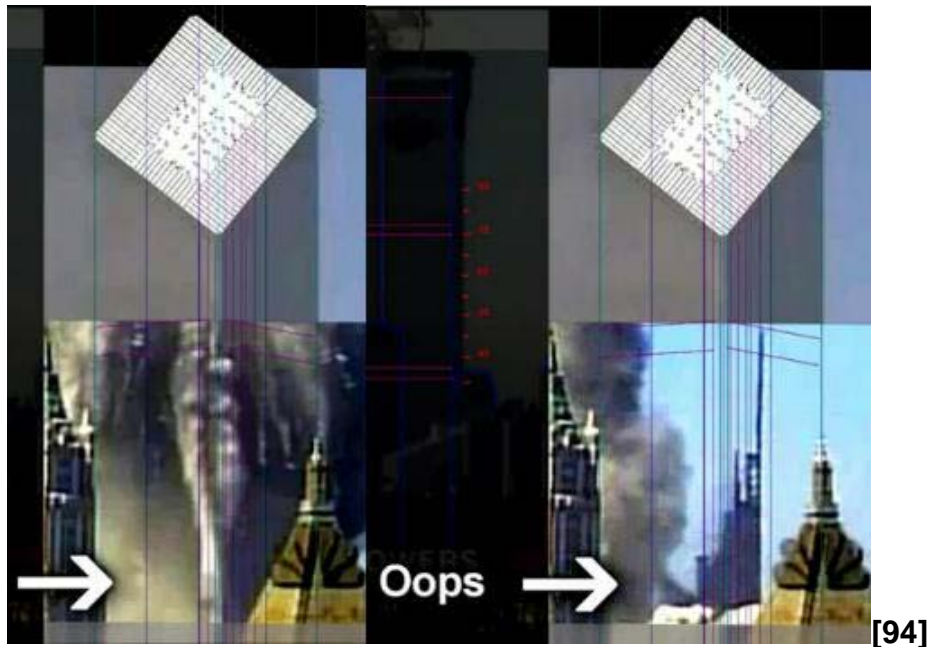
37:24 Watch a big squib coming from the sky-lobby band.

This alleged squib causes no visible damage to the sky-lobby band. A common answer to this remark is that “the explosion occurred within the building, therefore it is not visible”. The problem with that is the way in which the building collapsed. The core of each tower fell 15-20 seconds after the rest of the building. If explosions occurred deep within the building, the cores would have fallen down at the same time (or even before) the rest of the building. This did not happen.

Admittedly, this is a fair point the Guide raises. If the ejections did not cause physical damage to the exterior (which some obviously did), then it is logical to assume that they evidently must have caused damage to the interior. We already know that the outer core columns were destroyed when the Towers collapsed. But is there any visual evidence that these ejections caused damage to the core? Yes. In one video of the North Tower’s collapse, a squib can be seen shooting out of the building somewhere between the 53rd and 55th floor.



This ejection occurred right at about where the core of the North Tower appeared to be cut and was falling apart.



So much for arguing that the ejections didn't damage the interior or the exterior of either building. The ejections are obviously not being caused by the collapse. The ejections are clearly causing the collapses.

Molten Metal

42:32 Narrator: "The pile itself seemed to have a life of its own. It spewed fire when we dug into it."

42:38 The ground continued to burn. **Les E. Robertson publicly reported that 3 weeks after the collapse, live fires burned and molten metal still flowed underground**

Note the exact words that Robertson uses. He says molten **metal** was found under the World Trade Center. In public debate with Steven Jones (who is mentioned later in 9/11 Mysteries), Les Robertson expressed doubt that molten **steel** was under the World Trade Center.

The debate can be heard in this MP3 audio file.

<http://tinyurl.com/t7bw5>

9/11 Mysteries makes the assertion that "molten metal = molten steel" without providing any scientific evidence to back up their claims. We are offered no proof whatsoever that the metal that was allegedly under the towers was, in fact, steel.

9/11 Mysteries will attempt to place blame on "thermite" for the fires and molten metal that were present under the towers three weeks after 9/11. In a later section of this guide, we will explain why this is utterly absurd.

Yes, we will see quite a bit of absurdity in the Guide.

42:53 Ground Zero Crew Member 1: "...you see how this (inaudible) is still smoking? That's from the fire still burning. **Eight weeks later we still got fires burning.**"

43:01 Ground Zero Crew Member 2: "Steel-toed boots is one of the biggest things. Out still on the rubble **it's still -- I believe -- 1100 degrees.** The guys' boots just melt within a few hours."

In this interview, we are shown that fires are still burning at Ground Zero eight weeks after the fact. Again, 9/11 Mysteries tries to blame thermite for this in the next section of the film.

Thermite is an incendiary used by the military. It burns for a matter of seconds. Not eight weeks. The amount of thermite that would be needed to cause eight weeks' worth of fires underground would be enormous. We will expand on this later.

Note my second emphasis on Ground Zero Crew Member 2. She explains that the rubble is still 1100 degrees. This is caused by the fires.

We know that the World Trade Center had thousands of aluminum facades placed on the perimeter columns of WTC1, WTC2 and WTC7. Aluminum was also high in quantity on both 767s that hit the buildings. Aluminum melts at 1220°F. Now, if the top of the rubble pile was 1100°F, it is perfectly reasonable to assume that the deeper sections of the rubble, closer to the fires, would have been burning far higher than 1220°F.

Here the Guide presents us with several arguments for why the molten metal in the debris of Ground Zero is not evidence of a thermite demolition. These arguments, as well as others mentioned later on, are that:

- **Thermite cannot burn for several weeks.**
- **The molten metal was just molten aluminum.**
- **The amount of thermite needed to demolish the WTC could not have been placed in the buildings without detection.**
- **Thermite cannot be used as an explosive.**
- **Thermite cannot cut horizontally.**
- **The sulfidation of pieces of WTC steel was caused by normal sulfur-based materials in the buildings.**

As we will see, every one of these arguments is either false or misleading.

First of all, the Guide's claim that all three WTC buildings were clad in aluminum is false. Building 7 was clad in red granite. Already this presents a problem for the theory that the molten metal was aluminum. Pools of molten metal were found underneath WTC7, but no plane hit it and it was not clad in aluminum like the Towers were. But even if there was a source of aluminum in Building 7, is it likely that the molten metal was aluminum? Evidence suggests no. The fact that the

metal remained glowing red/orange for over six weeks suggests that it was a metal of fairly low heat conductivity and fairly high heat capacity. This means that it is more likely that the metal was steel or iron rather than aluminum. This raises the issue of why the metal glowed so long. The Guide asserts that thermite cannot burn for several weeks and that it burns off very quickly. What the Guide does not take into account is the enormous amount of chemicals the thermite reactions would produce, and how these chemicals would continue to react with one another in the debris. There were persistent fires burning in the debris at Ground Zero, and theories as to why these fires burned so long have been documented in a peer-reviewed scientific paper published in the Environmentalist. The paper was written by Dr. Steven Jones, Kevin Ryan and James Gourley, and documents that the fires that persisted at Ground Zero were most likely the cause of continuous chemical reactions in the debris:

For months after the destruction at the World Trade Center (WTC) on 11th September, 2001, the fires at Ground Zero (GZ) could not be put out, despite the following facts.

- Several inches of dust covered the entire area after the destruction of the WTC buildings.
- Millions of gallons of water were sprayed onto the debris pile.
- Several rainfall events occurred at GZ, some heavy; and
- A chemical fire suppressant called Pyrocool was pumped into the piles (Lipton and Revkin 2001).

The characteristics of these un-extinguishable fires have not been adequately explained as the results of a normal structure fire, even one accelerated by jet fuel. Conversely, such fires are better explained given the presence of chemical energetic materials, which provide their own fuel and oxidant and are not deterred by water, dust, or chemical suppressants.[95]

These types of chemical reactions would most certainly have caused the persistent heats at Ground Zero, and would therefore have continued to create the large pools of molten metal.[96]

Moreover, this is backed up by the fact that the temperatures that existed in the debris piles were physically impossible from an atmospheric jet-fuel fire. We know that the maximum temperature the fires could have reached was 1800°F. The Guide asserts constantly that these were the temperatures the fires reached. As Dr. Eagar pointed out, the fires likely did not reach these temperatures because there was nothing to ensure that the fuel and air were mixed in the best ratio. If this were true of the fires in the Towers, it most certainly would have been true of the fires in the debris, which would have been smothered by large amounts of steel and dust. But let's say for that sake of argument that the fires could have reached 1800°F. This would have been their maximum temperature. But evidence suggests that the temperatures were far hotter than this.

Throughout the dust the Towers produced as they collapsed, investigators found enormous amounts of tiny iron-rich microspheres. These types of spheres are formed through the melting of iron and surface tension pulling the iron into a sphere. These iron-rich spheres observed in studies conducted by the RJ Lee company[97] and the US Geological Survey (USGS)[98]. These spheres were also found in dust samples collected by Dr. Steven Jones and his associates.[99] Iron melts at temperatures of around 2800°F, which of course is 1000 degrees hotter than jet fuel burns. Debunkers have put forward several prosaic explanations for the presence of these spheres. The top explanations debunkers have put forward are:

- The spheres came from cutting torches used in the clean-up at Ground Zero.
- The spheres came from construction work when the Towers were initially built.
- The spheres came from the fly ash embedded in the buildings' concrete.

The first of these arguments is invalidated by the fact that many of the dust samples were collected from areas outside of the Ground Zero site. Many of the samples were also collected before the clean-up had begun.

The second argument is contradicted by the fact that there was a disproportionate amount of spheres in the dust. According to the RJ Lee report, iron particles generally constitute 0.04% of building dust on average. The report, however, noted that iron spheres constituted 5.87% of the dust in some areas. That is roughly 150 times more spheres in the dust than there should have been. So yes, iron particles are found in buildings, but not in the large amounts documented by RJ Lee. In any case, most of the spheres were found to have high iron content and low oxygen content, which is unlike the types of spheres produced by cutting torches.

The third argument is incorrect, as the iron constituents in fly ash are oxides rather than elemental iron.

The temperatures recorded in the debris at Ground Zero were certainly hot enough to melt iron.

The debris pile at Ground Zero was always tremendously hot. Thermal measurements taken by helicopter each day showed underground temperatures ranging from 400°F to more than 2,800°F.[100]

It's also worth noting that thermite reactions produce molten iron spheres as a by-product.

There is evidence of even higher temperatures in the debris of Ground Zero. The RJ Lee report noted that lead must have become hot enough to volatilize (boil) and then vaporize.

The presence of lead oxide on the surface of mineral wool indicates the existence of extremely high temperatures during the collapse which caused metallic lead to volatilize, oxidize, and finally condense on the surface of the mineral wool.[101]

Although the word “vaporize” was never used in the final version of the report, the 2003 version of this passage explicitly referred to temperatures “at which lead would have undergone vaporization.”[102]

Lead does not boil and vaporize until it reaches temperatures of 1749°C (3180°F). As the report indicates, therefore, the temperatures must have been not merely high, but extremely high.

Also, the USGS team revealed through a Freedom of Information Act request that they had observed and studied a molybdenum-rich sphere found in the dust from Ground Zero. Like the iron-rich spheres, this molybdenum sphere must have formed through melting and surface tension. Molybdenum melts at 2623°C (4753°F).

No explanations have been offered by RJ Lee or the USGS for the temperatures needed to cause lead to vaporize or molybdenum to melt.

Ultimately, we can conclude that the temperatures that existed in the debris at Ground Zero were far hotter than anything normal fires could cause.[103]

Contrary to what the Guide claims, the persistent temperatures at Ground Zero could very well have been caused by thermite reactions.

43:13 In November 2005, physics **Professor Steven Jones of Brigham Young University** published a **25-page treatise on the collapse of the Twin Towers and Building 7, applying the laws of physics to the official story.** From an interview on MSNBC:

Steven Jones was a professor at Brigham Young University who has no experience in building forensics, structural engineering or controlled demolitions. His lack of understanding of demolitions might explain his utterly absurd fantasy that thermite would ever be used in a controlled demolition. We will expand more on thermite later.

It should be noted that Steven Jones' paper was rejected by BYU and his fellow professors have downplayed his suggestions regarding 9/11.

<http://www.netxnews.net/vnews/display.v/ART/2006/04/09/443801bdadd6e>

“I have studied the summary of the report by FEMA, The American Society of Civil Engineers and several other professional engineering organizations. These experts have given in detail the effects on the Towers by the impact of the commercial aircraft. I have also read Professor Jones' (referred to) 42 page

unpublished report. In my understanding of structural design and the properties of structural steel **I find Professor Jones' thesis that planted explosives (rather than fire from the planes) caused the collapse of the Towers, very unreliable.**

D. Allan Firmage

Professor Emeritus, Civil Engineering, BYU"

If Steven Jones had used the **laws** of physics to support his paper, it would have been supported by people in the appropriate fields. His paper would have been peer-reviewed and published in a respected scientific journal. As of April 2007, none of Jones works regarding thermite (or 9/11) have been published in a respected journal.

To date, there are at least a thousand architectural and engineering professionals who agree with Dr. Jones' theories. And to date, Dr. Jones has three papers regarding 9/11 published in scientific journals, one of which proves that unreacted pieces of nanothermite were present in the dust from Ground Zero.[104]

An essay by Victory Ashley shows that the rejections of Steven Jones' theories are unfounded.

[P]ostings on *Wikipedia* began to focus on inserting critical statements from Jones' employer ([November 20, 2005](#)). The first one came in an email from BYU civil engineering chairman Miller, who states that the structural engineers at BYU do not agree with Jones' findings. Such a position would not be unexpected for a department chairman in a university given such a controversial situation. A battle was soon waged between *Wikipedia* contributors over the relevance and detail of these criticisms. During this time, however, Szymanski's article focusing on the criticisms came out, and Jones publicly responded. Since then, others have spoken out in support of Jones, so that early efforts to discredit his work (by showing how the engineering department officials disagreed with it) became less powerful.

Indeed, while many structural engineers have supported the NIST and FEMA reports, Jones has underscored how these reports also include disclaimers that stop short of any final conclusions, such as, "With the information and time available, the sequence of events leading to the collapse of each Tower could not be definitively determined," and, "The specifics of the fires in WTC 7 and how they caused the building to collapse remain unknown at this time". Furthermore, the local *KUTV* news station, *Deseret Morning News*, *MSNBC*, the *Pittsburgh Tribune Review* and others, have felt that Jones' questions do deserve to be heard.[105]

Jones: "As we read in the FEMA report, it says here -- and I put this in my paper, of course -- **'The best hypothesis' -- which is the only one they looked at -- fire -- 'has only a low probably of occurrence. Further investigation and analysis are needed to resolve this issue'** ... and I agree with that."

This quote is from the FEMA report Chapter 5 page 31. It is related to World Trade Center 7.

A "low probability of occurrence" does not mean "impossible". If it comes to probability, the

conspiracy theory does far worse. Consider this. What are the chances that tons of explosives and thermite could be placed using hundreds of people and huge pieces of machinery in three skyscrapers, without being noticed by **anyone**? The probability of that happening is extremely low.

Further investigation and analysis **are** being conducted by the NIST regarding World Trade Center 7. The NIST has explored the hypothesis of explosives along with that of fire and has concluded that explosives were **not** used in any way, shape or form on 9/11.

Let's examine this. The probability of something being done can increase if it has been done before (or something similar). So the question is: Could explosives be planted in a building covertly, and has it been done? The answer is yes. In 2009, drills were successful in planting bombs in ten high-security federal buildings, including DHS offices.[106] Now, how probable does that sound? Not very, but it happened. What's more, planting explosives in the WTC, according to Jim Hoffman, "would have been far simpler than the structural retrofit of the CitiCorp Tower in New York, carried out unbeknownst to the building's very tenants." [107]

So, we have examples of covert work being done in buildings without its residents' knowledge. However, a steel-framed high-rise skyscraper has NEVER collapsed due to fire. You can therefore decide for yourself which scenario you believe is more probable.

Carlson: "I'm sorry that we are out of time, and I'm not sure that you have fully..."

Jones: "Whoa! One other thing I want to mention --"

Carlson: "Okay, if you could hit it, just really quickly --"

Jones: "Okay, here we go. Molten **metal** in the basements of all three buildings --"

Carlson: "Right."

Jones: "**And yet all scientists now reasonably agree that the fires were not sufficiently hot to melt the steel.** So what is this molten **metal**? It's **direct evidence for the use of high temperature explosives, such as thermite.** Thermite produces molten iron as an end product."

Carlson: "Okay, we appreciate your coming on, even if I don't understand your theories. We appreciate your trying to explain it. Thanks."

Steven Jones also switches between "molten metal" and "molten steel" rather frequently. He states that molten metal was found in the basements of all three buildings. Yet he fails to specify what types of metal were found in the basements. He then states that the fires were not hot enough to melt steel without one ounce of proof that the metal that was discovered in the basements was, in fact, steel. He then states that this molten metal is evidence for thermite without proof that this molten metal is actually iron or steel.

As I've already demonstrated, the physical characteristics of the molten metal, and the heats that existed at Ground Zero, indicate that the metal was more likely molten steel or iron rather than aluminum.

Jones then claims that "high temperature explosives, such as thermite" were used in the towers. How is it that a man who is supposedly educated on thermite claims that it is an explosive formula? Thermite is not an explosive at all.

<http://en.wikipedia.org/wiki/Thermite>

<http://dansdata.blogspot.com/2007/01/25/exothermia/>

Thermite is not an explosive, but it can do a very good impression of one if there's water in the area. Or ice.

Earlier I showed this to be wrong. Thermite can be formulated to be very explosive. And Dr. Jones has found traces of nanothermite, the exact type of thermite formulated to be explosive.

44:31 Professor Jones barely got in his mention of "thermite." **An incendiary used by the military**, thermite is a compound of iron oxide and aluminum which, when ignited, sustains an extreme heat reaction, creating molten iron. In just 2 seconds, thermite can reach temperatures over 4500 degrees Fahrenheit – **quite enough to liquefy steel. This is thermite melting the engine of a car.**

The military does not use thermite to demolish buildings. Unlike napalm, it is not used as a weapon. The military uses thermite grenades to destroy sensitive equipment so enemy forces cannot seize it.

Thermite is not used by anyone for demolitions. Thermite does not burn in any particular direction. Gravity, however, will cause the thermite to burn downwards. For this reason, thermite cannot be used to cut a vertical beam.

This has been proven to be false. Jonathan Cole, a civil engineer, has conducted numerous experiments with thermite and shown that, set up in a specific fashion, it can be used to cut in any direction necessary, including horizontally.



[108]

As you can see, thermite can be set up to cut either vertically or horizontally.

9/11 Mysteries states that the temperatures produced by thermite are enough to liquefy steel. Although this is true, 9/11 Mysteries has failed to provide any evidence whatsoever to prove that liquefied steel was actually existent during and following the events of 9/11/2001.

This is getting rather repetitive.

9/11 Mysteries brings up the video from a UK television show “Brainiac” that shows us thermite melting through the engine of a car. This is what debunking911.com has to say about the topic.

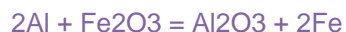
<http://www.debunking911.com/thermite.htm>

“Thermite in general makes an ugly hole with molten metal drips/blobs. It doesn't make clean cuts. It's a powder that undergoes a violent chemical reaction as seen in the video below.

http://www.guzer.com/videos/thermite_car.php

Note how much thermite is used. The pot is about a liter, but how much thermite is that?

Stoichiometric thermite requires 2 moles of Al per 1 mole of Fe₂O₃



2 moles of Al weigh 54 g
1 mole of Fe₂O₃ weighs 160 g

density of Al=2.64 g/cc
density of Fe₂O₃=5.24 g/cc

54 grams of Al is equivalent to 20.5 cc of Al.
160g of Fe₂O₃ is equivalent to 30.5 cc of Fe₂O₃

Therefore, 51 cc of fully dense powder of 20.5 cc Al and 30.5 cc Fe₂O₃ weighs (54+160) g = 214 g.

A volume of 1000 cc would weigh (1000/51)*214 = 4.2 kg

For a powder packing density of 50%, the powder would weigh:

$0.5 \times 4.2 \text{ kg} = 2.1 \text{ kg} = 4.8 \text{ lb}$

That much just to burn a small hole in a small car engine. I bet it's even an aluminum block but let's say it isn't. How much do you think it would take to burn a massive core column? Then add enough to burn for 6 weeks! You see where we're going. You'd need tons."

Again, an argument that is nothing but an assertion.

45:23 Was thermite used in conjunction with explosives on September 11th? Watch this very bright substance pouring from the 81st floor of the South Tower:

For one second, we will ignore the simple fact that the amount of thermite that would have been required to create this effect would have been enormous and it could not have been hidden prior to 9/11. We will offer a far more reasonable explanation for the stream of fire falling from WTC2 before collapse.

The Guide also seems to ignore the simple facts which refute its arguments.

If we note the location of this alleged "thermite" we will notice that it just happens to be right where a 767 airline slammed into the building at over 500 mph. Planes are not made of steel. They are mostly comprised of aluminum. We know that the temperatures of the fires in the tower were over 1200°F at a minimum (this figure is offered to us by 9/11 Mysteries, the real figure is higher). Aluminum melts at 1220°F.

This flow cannot be steel from the buildings due to the simple fact that the steel on the towers would fail well before melting point. The flow is likely to be a mixture of aluminum from the airliners and outskirts of the building, aluminum oxides, jet fuel, molten glass, and whatever else the aluminum flowed over as it reached the open window.

Such a flow would appear orange, and would cool to a dark color.

This is what NIST has to say on the issue:

http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

"Photographs, and NIST simulations of the aircraft impact, show large piles of debris in the 80th and 81st floors of WTC 2 near the site where the glowing liquid eventually appeared. Much of this debris came from the aircraft itself and from the office furnishings that the aircraft pushed forward as it tunneled to this far end of the building. Large fires developed on these piles shortly after the aircraft impact and continued to burn in the area until the tower collapsed.

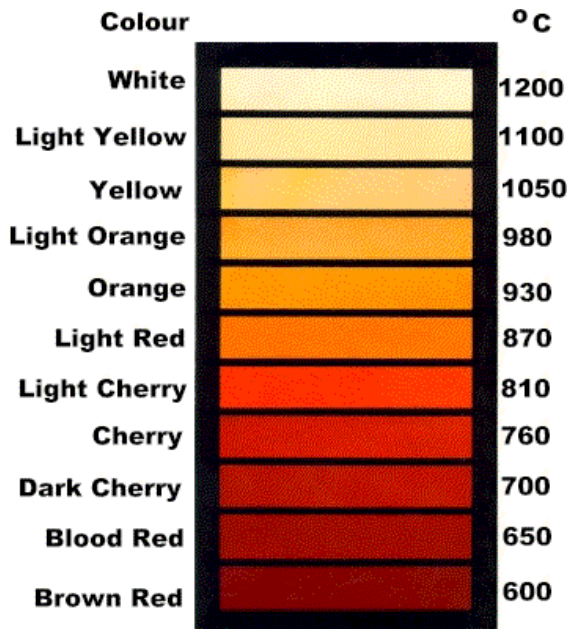
NIST concluded that the source of the molten material was aluminum alloys from the aircraft, since these are known to melt between 475 degrees Celsius and 640 degrees Celsius (depending on the particular alloy), well below the expected temperatures (about 1,000 degrees Celsius) in the vicinity of the fires. Aluminum is not expected to ignite at normal fire temperatures and there is no visual indication that the material flowing from the tower was burning.”

A response from 911research:

NIST's explanation for the orange color of the spout is dubious given that the various materials to whose combustion it attributes the orange glow would have been extremely unlikely to have remained mixed with molten aluminum to the degree needed to produce the homogeneous color seen in the videos.

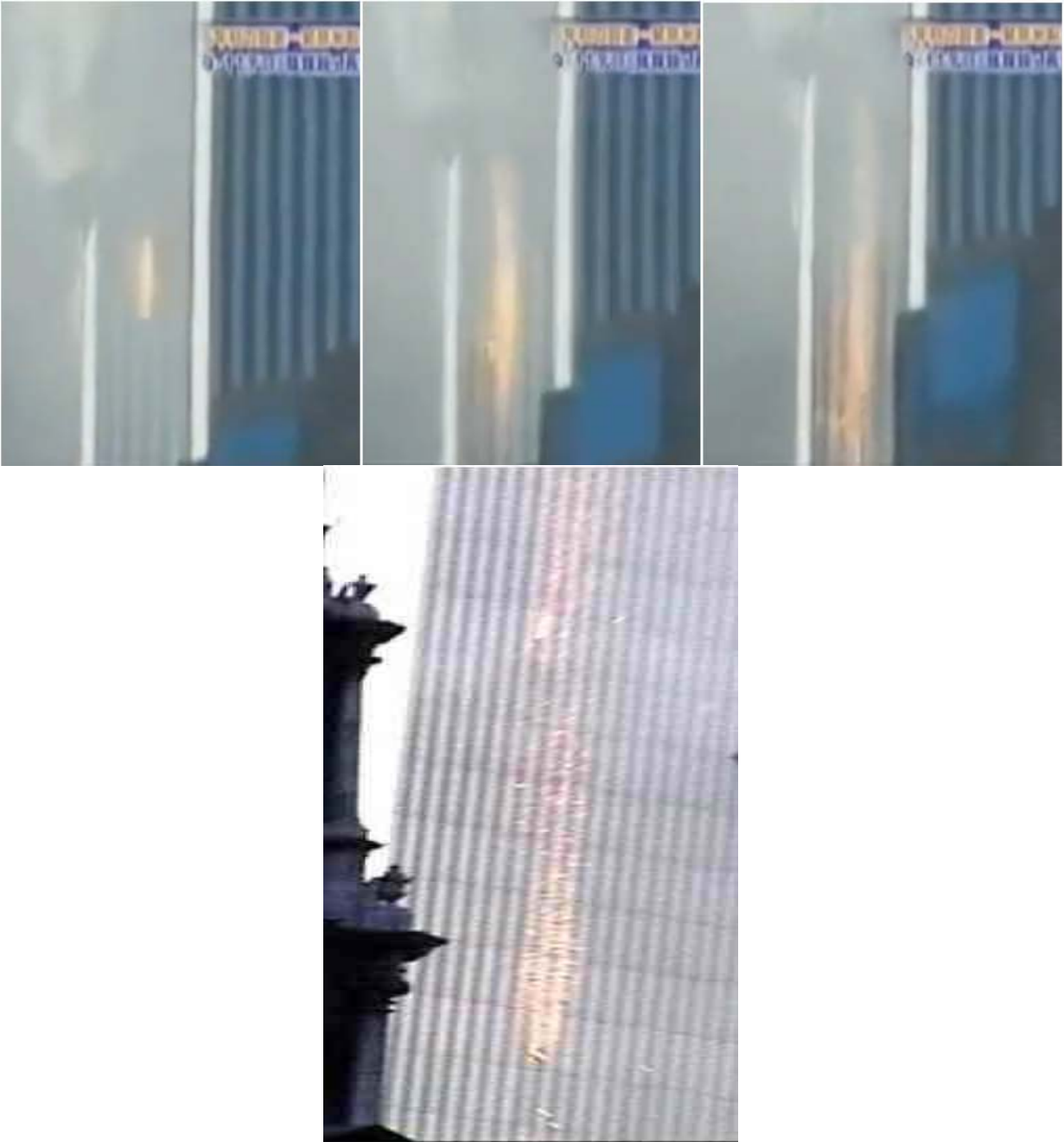
Physicist Steven E. Jones has performed [a number of experiments](#) mixing various combustibles into molten aluminum. In all cases the aluminum exhibited its normal silvery color, while the added combustibles separated.[109]

Organic materials do not mix with molten aluminum, in very much the same way that oil does not mix with water. Still, other debunkers have argued that the material was aluminum, and that it was simply heated to high enough temperatures to cause it to glow orange. Below is a graph showing the different colors molten aluminum becomes depending on what temperature it is heated to.

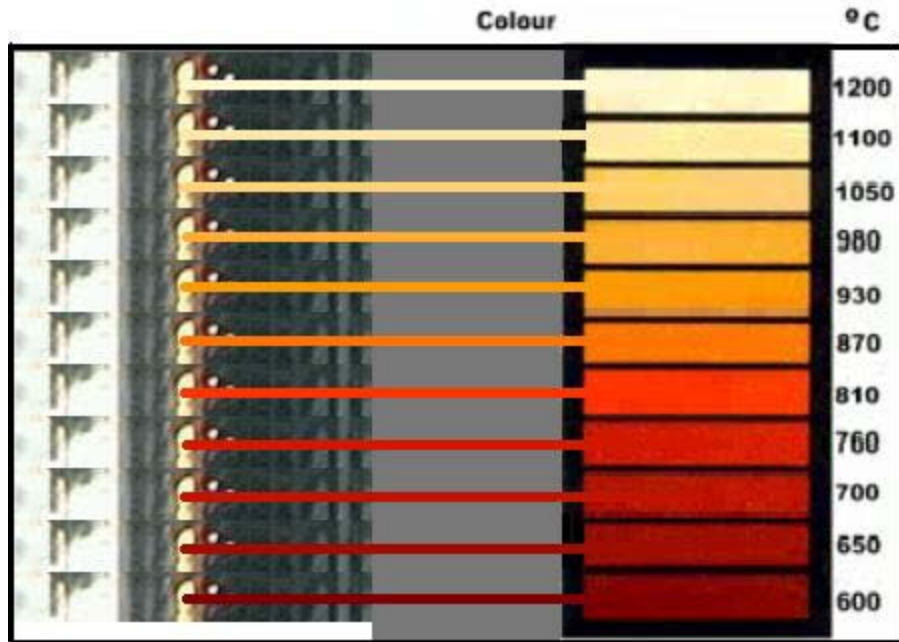


At 980°C (1800°F), molten aluminum begins to glow light orange. Debunkers argue that this is how hot the fires became in the Towers. We saw earlier that NIST has no evidence for these kinds of temperatures. But for the sake of argument, let's say the fires could have been this hot. Exactly how long does aluminum glow at 1800°F? It turns out... not very long. Because of aluminum's

low heat capacity, it doesn't retain a bright glow for very long once it leaves its heat source.[109] The metal that flowed from the South Tower continued to glow as it flowed away to the ground.



But there's another problem with the theory that this is aluminum. The metal was heated high enough so that it glowed yellow/white hot.



So, even if this metal was aluminum, it would still need to be explained what heated it to over 2000°F to get it to glow that bright. Ultimately, the metal is more likely to molten iron.

45:48 Appendix C of the FEMA Report describes sulfur residues on the World Trade Center steel. The New York Times called this the “deepest mystery” of all. **Sulfur** slightly lowers the melting point of iron, **and iron oxide and iron sulfide had formed on the surface of the structural steel. Sulfur used with thermite is called “thermate” – producing even faster results.**

Another thing that the creators of 9/11 Mysteries mention is “thermate”. They claim that the presence of sulphur on the structural steel at the World Trade Center is evidence for the use of thermate. However, let's look further into thermate and its ingredients.

Thermate is a mixture of normal thermite and pyrotechnic additives which have been found to be superior to standard thermite for incendiary purposes. However, regardless of the speed of reaction increase, gigantic amounts of thermate would still need to be planted to bring down the World Trade Center buildings. Thermate is generally comprised with 68.7% thermite, 29% barium nitrate, 2% sulphur, 0.3% binder.

To note is the addition of barium nitrate. Thermate contains nearly 15 times more barium nitrate than sulphur. If thermate was used on the World Trade Center buildings, why was no barium nitrate found on the steel or anywhere at Ground Zero?

Here the Guide is confusing Steven Jones’ arbitrary usage of the word thermate with military grade Thermate-TH3, which is 68.7% thermite, 29.0% barium nitrate, 2.0% sulfur, and 0.3% binder.

There are a wide variety of different types of thermate, thermite, and other aluminothermic reactions. In fact all you need is a metal oxide whose metal is lower in the reactivity series than aluminium to create such a reaction. So finding barium nitrate is not at all necessary to prove thermate was used.[110]

Sulphur does not mean thermate, just like carbon does not mean gunpowder. So, right now, you're probably asking where the sulphur that was found actually came from if thermate was not used. Jonathen Barnett from FEMA states that the three most likely sources of the sulphur were:

- The large amounts of sulphur-based drywall used in the towers. (most likely of the three)
- Fuels leaking at Ground Zero
- Acid Rain (least likely of the three)

We will first deal with the most likely of these three. Although sulfur-based drywall was the third most used ingredient in the entire construction of the WTC site, there are more elements in drywall than just sulfur. Gypsum drywall also contains a large amount of calcium. The sulfur and calcium in drywall are tightly bound together with oxygen into calcium sulfate.[111] It is important to note that the sulfur was not just found on the steel. The steel had been sulfidized, which means that sulfur had entered into the intergranular structure of the steel. Niels Harrit, a chemist from the University of Copenhagen and lead author of the Active Thermite Material paper, has explained that the gypsum wallboard could not possibly have caused this because, although gypsum contains sulfur, it is not elemental sulfur, which can react, but sulfur in the form of calcium sulfate, which cannot.[112]

Regardless, civil engineer Jonathan Cole has demonstrated that none of these possible sources could have caused the sulfidation of the steel. Using a steel beam, Jonathan Cole conducted an experiment using gypsum board, diesel fuel, rain water, and other suggested sources. After placing all of these substances on the beam and lighting a fire around it for an entire day, the steel beam was not sulfidized at all.[113] Ultimately, there does not appear to be any prosaic explanation for the sulfur in the steel, and the most likely seems only to be thermate.

Conclusion

We have been offered no evidence that the molten metal reported at Ground Zero was actually steel. The assertion that this metal was steel is purely speculation based on a lack of understanding of alternate explanations.

The suggestion of thermite and/or thermate being used on 9/11 also lacks any valid evidence. Simple logic and basic research shows us how ridiculous the suggested use of thermite is in the context of building demolition, due to the following facts:

- a) it has never been done before;
- b) extremely large amounts of thermite would have been needed and thus could not be hidden; and;
- c) thermite cannot cut through vertical steel columns.

9/11 Mysteries is often passed off as “scientifically accurate”. We cannot see how this is true when the film claims that rust and drywall are evidence for a thermite/thermate reaction.

Personally, I cannot see this Guide as a valid refutation of 9/11 Mysteries when the slightest bit of research shows its claims to be false.

The Demolition Industry

46:36 Let’s look at what happens in the demolition industry. **Taking down large structures requires preparation.** Powerful explosives and heavy equipment are **used in advance** to weaken the foundation and bottom sections of a building before **additional explosives and gravity bring the rest of it down.**

At the start of this section, we are shown several examples of controlled demolition in the form of video footage. The video is obtained from a company known as Implosion World. Of course, the irony here is that Implosion World actually wrote a paper that details the absurdity of the controlled demolition conspiracy theory with respect to the World Trade Center buildings. They also wrote a “Q&A” surrounding the events of 9/11 with controlled demolitions in mind.

<http://www.implosionworld.com/wtc.htm>

<http://www.implosionworld.com/Article-WTC%20STUDY%208-06%20w%20clarif%20as%20of%209-8-06%20.pdf>

Software engineer Jim Hoffman has written a lengthy point-by-point rebuttal to Implosion World’s essay, which was written by one of their demolition photographers Brent Blanchard.[114]

9/11 Mysteries does acknowledge the fact that controlled demolitions require preparation. What they fail to take into account is how much work is involved in doing so. They even state that “powerful explosives and heavy equipment are used in advance” but fail to explain how this preparation could be done in office buildings that were occupied 24/7, right up until the moment they fell.

The creators of 9/11 Mysteries also show footage of preparation work being done in a few buildings. We can see large amounts of drilling (using rather large equipment), along with

explosive devices and detonation cord being placed. Yet somehow, we are supposed to believe that all of this could have been done in three occupied buildings without one person noticing before or during 9/11.

Demolition is not as simple as placing a few bombs under a few desks and using wireless connections to detonate them. Walls need to be removed to access critical columns; explosives then need to be attached onto the column that is to be demolished. Once this is done, the explosive needs to be connected to a length of detonation cord, which is then connected to the trigger.

9/11 Mysteries admittedly makes the case for controlled demolition much weaker by outlining a scenario where the preparations would have taken a huge amount of effort and work. Admittedly, demolitions do require quite a bit of effort to set up. However, contrary to what the Guide claims, demolitions can use wireless technology to destroy a building. Such technology has been available for decades.[115] Robert Erickson, the producer of a National Geographic piece on 9/11, confirmed in email exchanges with Dr. Steven Jones that demolitions can be set up wirelessly and detonated by radio signals.

“I asked demolition experts about setting off charges with radio signals. They said it was very feasible. Everyone seems to agree to the viability of radio signals setting off explosives. That would eliminate some of the primer cord.”[116]

Tom Sullivan, a former explosives technician from Controlled Demolition, Inc. has also confirmed this.[117] What’s more, Brent Blanchard, the same person who wrote the debunking article that the Guide references, also confirmed that radio controlled detonations are very feasible in a controlled demolition.[118]

The fact of the matter is that conventional demolitions do not require the use of heavy equipment. Holes are often drilled to place cutter charges adjacent to columns. That is easily done with hand tools. If heavy equipment is used, it's generally to gut the building in order to reduce the dust produced during its demolition.

Let's look at the preparation that was put into the tallest building ever demolished. The building was the J.L Hudson's building in Detroit, Michigan. It was 439 feet and was 29 stories high, including its mechanical penthouses (excluded from Implosion World's 26 story figure).
<http://www.implosionworld.com/records.htm>

“At first, protesters objected loudly to the razing of this 26-story, 439-foot tall structure located in the heart of Detroit’s commercial district. But years of neglect and decay precluded an economically viable alternative, and the building was brought down in 1998.”

More research into the building's demolition clearly outlines the amount of work and labor that was required to bring the building down.

<http://www.controlled-demolition.com/default.asp?reqLocId=6&reqItemId=20020304145120>

"In 24 days, CDI's 12 person loading crew placed 4,118 separate charges in 1,100 locations on 9 levels of the structure. Over 36,000 ft. of detonating cord and 4,512 non-electric delay devices were installed in CDI's implosion initiation system. As the implosion required the detonation of a total of 2,728 lb. of explosives, CDI implemented 36 "primary delays" and an additional 216 "micro-delays" in the implosion initiation sequence in an attempt to keep detonation overpressure to a minimum."

And a quote from CDI:

http://www.history.com/media.do?id=most_hudsons_implosion_broadband&action=clip

The Hudson Building "It took us 24 days with 12 people doing nothing but loading explosives..." James Santoro – Controlled Demolition Incorporated"

The above figures are for a 29 story building (L.J Hudson) that was over 920 feet shorter than WTC1 and WTC2, and over 130 feet shorter than WTC7. It would take approximately 72 days with 12 people doing nothing but placing explosives to rig just one tower for a controlled demolition. That is being generous and is not even taking into account the fact that workers would have to do the work completely unnoticed. This means heavy drilling, thousands of feet of detonation cord, thousands of explosives, dozens of workers and missing walls would have all had to go unnoticed by over 50,000 people who worked in the Twin Towers. Let's not forget that the towers were occupied 24/7. If we add WTC7 and the other tower into the equation, we can see where this is going. It quickly becomes ridiculous.

There are a few key facts about the demolition of the JL Hudson Building that the Guide omits. Here is what CDI also had to say about the building and setting it up for demolition:

The store was built in 12 separate stages, the first in 1911 and the last in 1946. The complex had two retail basements and 23 above grade retail floors, including mezzanines. Two additional basements and six upper stories in a tower, provided storage and mechanical support for the 2.2 million square foot building. In all there were 33 levels in the structure.

No structural drawings of the facility were available, making structural analysis and implosion design a considerable task for CDI. The interdependency of the 12 different construction stages, with differing construction and variable column flange directions and bay widths created what CDI calls differential natural failure modes in each section of the structure which CDI's demolition program had to cope with. These factors created an implosion design, preparation and dynamic control challenge for the 2nd and 3rd generation of a family recognized as the international founders of the commercial implosion industry (see ENR cover story October 1972).[119]

As pointed out by 911blogger:

What took so long, according to the website, was the design of the implosion because there were 12 separate sections to the 2.2 million sq. ft. building. All built at different times, with different construction techniques. And no drawings of the building.

Now compare that to Building Seven. 47 floors, as opposed to the Hudson buildings 30 levels; the Hudson building had 2.2 million sq ft of floor space, where Building Seven had roughly 45,000 sq ft per floor totaling... 2.2 million sq ft.

So, theoretically, the demolition requirements would be similar and the design part would certainly be easier. Now, that would mean, that the actual charges if they used a 12 person team could be set in 24 days. Or, if they used 20 people... you do the math. But this is all factually based on real world experience provided by CDI's own site.[120]

The Twin Towers and Building 7 were built in floors, not multiple sections. Therefore, they could actually have been easier to set up than the JL Hudson building. And I have already explained that covert work can be done unnoticed in a large skyscraper.

47:17 Here's what demolition experts use in steel-framed buildings. (pause) **The linear shaped charge:**

Mark Loizeaux: "It's a chevron-shaped or v-shaped charge that you can focus at a specific target, and it's lethal. It generates around 3 million pounds per square inch pressure at a speed -- depending on the explosive inside the shaped charge -- in excess of 27,000 feet per second."

Again, how is it that so many shaped charges were placed in occupied buildings unnoticed leading up to 9/11? They are literally strapped to the column that is to be blown. They cannot be hidden under desks, in potted plants, etc.

Please note that I am not going to deal with this argument every time it is brought up. The Guide brings this up so much, and I don't particularly like repeating myself.

9/11 Mysteries then sources Mark Loizeaux. Mark works for Controlled Demolition Inc which is a company that assisted with cleaning up at Ground Zero in the months following 9/11, and a company that supports the official story. Mark himself stated in New Scientist magazine that he supports the official story for the collapse of the World Trade Center buildings.
<http://www.newscientist.com/article.ns?id=mg18324575.700>

"And I sat there watching, I picked up the phone and and I called a couple of people on the National Research Council Committee involved in assessing the impact of explosives. They said "What do you think this is, that they're going to fail, that they're both going to fail?" The expression around was they're going to pancake down, almost vertically. And they did. It was the only way they could fail. It was inevitable."

This certainly sounds like an interesting prediction by Mark Loizeaux. However, this quote is from 2004. Mr. Loizeaux had some very different things to say about the Towers collapsing in an interview given two days after 9/11:

Observing the collapses on television news, Loizeaux says the 1,362-ft-tall south tower, which was hit at about the 60th floor, failed much as one would like to fell a tree. **That is what was expected**, says Loizeaux. But the 1,368-ft-tall north tower, similarly hit but at about the 90th floor, "telescoped," says Loizeaux. It failed vertically, he adds, rather than falling over. **"I don't have a clue,"** says Loizeaux, regarding the cause of the telescoping.[121]

So, Mark Loizeaux went from having "no clue" why the buildings collapsed vertically, and then, three years later, knew from the beginning that the towers would pancake straight down. An interesting contradiction, but you won't find this fact being brought to light by the Guide.

47:42 Besides the unfathomably powerful shaped charge, blasters have a lot of tricks:

Comments from blasting videos:

Narrator: "There are over a thousand different types of explosives, different because they detonate at varying speeds..."

Blaster 1: **"This is detonating cord**, and this burns at about 21,000 feet per second. Comes in all colors, pastels too..."

Blaster 2: "With the use of delays, we can control pretty much where the debris lands; we can control vibration; we can control noise levels. Timing and [sic] delays are the keys to just about everything in our business."

9/11 Mysteries shows us footage of a woman presenting some detonation cord to the camera. What 9/11 Mysteries fails to do is explain how the large amounts of detonation cord used in controlled demolition would have been hidden in the World Trade Center buildings.

The Hudson building in Detroit, which was detailed earlier in this article, used 36,000 feet of detonation cord. This was for a 29-story building. WTC1, WTC2 and WTC7 combined were 267 stories tall. That is 110 each for WTC1 and WTC2 plus 47 for WTC7.

If 36,000 feet of detonation cord was used for 29 stories, how much would be needed for 267? If we use some simple math and divide 36,000 by 29 (to get feet per floor) and then multiply it by 267 we get 331,448.28 feet (62.77 miles) of detonation cord. How is it that 331,448.28 feet (62.77 miles) of detonation cord was connected, placed and hidden in the occupied World Trade Center buildings 1, 2 and 7? Quite simply it is not possible.

As I've already shown, detonation cords and wires are not necessarily required for a controlled demolition. But even if they were needed, could they really not be hidden within the buildings? We are talking about skyscrapers that already had

miles of networking cables. It wouldn't have been hard to disguise the wires, if indeed there were any.[122]

48:24 And what is the result?

Jack Loizeaux: “The thing that pleases me is the fragmentation and the control. When you take a building, break it up into millions of pieces and put it into its basement, as artfully as we do. And it works just like clockwork. So we’ve got it all down to a science. It just -- it gives me goose bumps to talk about it.”

Jack Loizeaux also works for CDI. 9/11 Mysteries continually uses people who support the official story in an attempt to support their alternate theory. This is probably because no one in the appropriate fields supports their theory.

The hundreds, if not thousands, of architects, engineers, physicists, chemists and other professionals evidently do not qualify as people in the “appropriate fields.”[123]

Most of the next section of the Guide, 9/11 WTC Demolitions, is mostly accurate about errors in 9/11 Mysteries. The scenario the film presents for how the buildings were demolished is highly unlikely in terms of the claims about pre-collapse basement blasts, pre-collapse interior blasts, William Rodriguez, and the pre-collapse ground-level explosions. Again, it is important to look at Jim Hoffman’s take on this section.[124] Jim Hoffman has outlined a much more plausible scenario for the sequence of demolition that may have occurred within the Towers.[125]

Who Knew?

52:03 Some people appear to have **known the imminent future on that fateful day. FEMA had arrived in New York on Monday night, ready for a bio-terror drill.** Spokesman Tom Kenney to Dan Rather:

52:22 Tom Kenney: “To be honest with you, we arrived on late Monday night and went into action on Tuesday morning, and not until today did we get a full opportunity to work the entire site -- other than this part of Church and Day to which we were deployed.”

FEMA conducts several drills a year. In fact, if we look at some of FEMA’s activities pre-9/11, we can see that a bioterrorism drill was nothing unusual.

“In fact, an **early 2001 FEMA report predicted that the three most likely serious disasters to hit the U.S. would be a terrorist attack on New York, a major earthquake in San Francisco, and the one FEMA**

considered the most potentially catastrophic--a hurricane and flood in New Orleans.”
*Emphasis Mine

A testimony of Tara O'Toole, MD, MPH, before the Congress of the United States, U.S. Senate Government Affairs Subcommittee on International Security, Proliferation and Federal Services, July 23, 2001.
<http://tinyurl.com/yu56s2>

“Encourage, design and assess the use of training programs, exercises and drills for bioterrorism responders, including high-level decision makers: Well-designed bioterrorism response exercises provide an opportunity to test preparedness plans and precepts. Tabletop scenarios and more elaborate drills provide opportunities for collaboration among the diverse array of communities and individuals who would be involved in managing actual epidemics.”

A bioterrorism drill in NYC leading up to 9/11 was nothing out of the ordinary for FEMA. It was purely coincidence that the exercise had been planned for September 12th. Suggesting that FEMA knew that this attack was coming is despicable, to say the least.

Admittedly, the meaning of Tom Kenney's comments is controversial.[126]

52:38 And Rudy Giuliani, Mayor of New York, tells ABC's Peter Jennings that he **was aware the towers would be coming down**:

52:44 Rudy Giuliani: “What's going on now is a massive rescue effort.”

Peter Jennings: “...and do you believe it is hundreds or thousands?”

Rudy Giuliani: “I really don't want to say right now, Peter. I think it's going to be a horrible number. I saw people jumping out of the World Trade Center. I saw some of the firefighters who I know going into the building, so... And we were in a building in which we were trapped for 10, 15 minutes -- and we set up headquarters at 75 Barclay Street which was right there with the Police Commissioner, the Fire Commissioner, the head of Emergency Management -- and we were operating out of there when we were told the World Trade Center was going to collapse.”

Although we will offer our own explanations, we recommend reading the article at 911myths.com that deals with the Giuliani issue. It is far more detailed and can be found here: http://www.911myths.com/html/giuliani_and_the_wtc_warning.html

Consider the following:

“An engineer from the Department of Buildings reported that the structural damage appeared to be immense. The stability of both buildings was compromised. In particular, the engineer was worried about how long the north tower would stand.”

"102 Minutes", Jim Dwyer and Kevin Flynn

Several educated people warned others that the Twin Towers would collapse due to structural failure. This included the NYPD aviation helicopter that was circling the World Trade Towers before their collapse.

http://www.skyscrapersafety.org/html/article_20040619.html

"The NYPD aviation unit reported critical information about the impending collapse of the buildings," lead investigator Shyam Sunder said at a presentation in midtown.

Now, look who happened to be with Giuliani throughout the ordeal.

http://www.globalsecurity.org/security/library/congress/9-11_commission/040518-sheirer.pdf

"I received a radio transmission from FDNY Captain Joe Folino, an OEM responder, who informed me that **the Mayor had requested that I join him and Police Commissioner Bernard Kerik** at 75 Barclay Street, where they were establishing a temporary executive command center. I left the North Tower lobby and went to Barclay Street."

*Emphasis Mine

It is reasonable to assume that Mr. Kerik learnt about these concerns from the aviation unit and voiced them to Giuliani.

Furthermore, there appears to be another possible explanation for Giuliani's foreknowledge of the WTC collapse. Just seconds into the collapse, people told Giuliani the building was coming down.

http://www.globalsecurity.org/security/library/congress/9-11_commission/040518-sheirer.pdf

"The Mayor was on the phone with the White House, and had been told the White House was being evacuated. Suddenly, the building began to shake, and someone yelled the towers were coming down. We could hear the roar of the building collapsing, and then there was silence and darkness."

http://myhero.com/myhero/hero.asp?hero=r_giuliani

"From there Giuliani, needing phone lines, commandeered a Merrill Lynch back office at 75 Barclay Street. After 45 minutes someone yelled, "Get down! It's coming down!" The force of the collapse flattened the building across the street"

<http://www.alumni.hbs.edu/bulletin/2002/april/nyc.html>

"The mayor also wanted to talk to the White House. As I handed him the phone, saying, 'Vice President Cheney is about to get on the line,' a police official ran in yelling, 'Get down! Everybody get down! It's coming down!' "

The explanation given by the Guide and the explanation given by 911myths.com are in fact both very similar. Both have to do with the idea that Giuliani was simply warned by others who had assessed the condition of the Twin Towers. However, this explanation is extremely problematic. Let's first deal with the idea

that Giuliani was referring to warnings given as the first Tower was collapsing. Although I have no doubt that these quotes are totally legitimate, I highly doubt that they were the warnings Giuliani was referring to. This person (most likely a police officer) came into the command center saying that the building was *collapsing*. Giuliani stated in his interview with Peter Jennings that he was told that the WTC was *going to collapse*. If Giuliani was referring to warnings given as the building was collapsing, it is more likely that he would have said something like “we were told that the WTC was collapsing” or “we were told that the WTC was about to collapse.” Giuliani’s actual statement indicates he was warned before the first building actually began to collapse.

But the fact of the matter is that Giuliani has been confronted about the warning he received. Activists from the group We Are Change confronted Giuliani about the warning he received, and amazingly, Giuliani claimed he was not warned at all.

“No one that I knew of had any idea that they would implode. That was a complete surprise.”
–Rudolph Giuliani [127]

Interesting that he used the term “implode” to describe the buildings’ collapses. Again, if Giuliani had simply been warned by those who had assessed the damage to the buildings, why did he not simply state this? And this also seems to confirm that his statement to Peter Jennings did not refer to warnings given as the first building came down, as he also could have given this explanation when he was confronted. But instead, he claims that no one gave him any warning at all. This is an obvious lie and a major contradiction.[128]

53:23 Similarly, Larry Silverstein, new leaseholder of the World Trade Center, regretfully declared that **a decision was made to “pull” Building 7 by the end of the day** – the last structure added to the World Trade Center complex.

53:39 Let’s hear Mr. Silverstein’s actual words, delivered for our benefit in the 2002 PBS documentary “America Rebuilds”:

Silverstein: “I remember getting a call from the fire department commander, telling me they were not sure they were going to be able to contain the fire, and I said, ‘you know, we’ve had such a terrible loss of life, maybe the smartest thing to do is pull it’, and they made that decision to pull, and then we watched the building collapse.”

No decision was made to pull WTC7. Silverstein stated that a decision was made to “pull”. So what could this mean? Well, as it turns out, Larry Silverstein’s spokesperson later clarified Silverstein’s comments.

<http://usinfo.state.gov/media/Archive/2005/Sep/16-241966.html>

“In the afternoon of September 11, Mr. Silverstein spoke to the Fire Department Commander on site at

Seven World Trade Center. The Commander told Mr. Silverstein that there were several firefighters in the building working to contain the fires. Mr. Silverstein expressed his view that the most important thing was to protect the safety of those firefighters, including, if necessary, to have them withdraw from the building.

Later in the day, the Fire Commander ordered his firefighters out of the building and at 5:20 p.m. the building collapsed. No lives were lost at Seven World Trade Center on September 11, 2001.

As noted above, when Mr. Silverstein was recounting these events for a television documentary he stated, "I said, you know, we've had such terrible loss of life. Maybe the smartest thing to do is to pull it." Mr. McQuillan has stated that by "it," Mr. Silverstein meant the contingent of firefighters remaining in the building."

Funnily enough, there is also evidence to support this clarification. Note the wording used by Banaciski and the frequent use of the term "pulled":
<http://tinyurl.com/v5rds>

"They told us to get out of there because they were worried about 7 World Trade Center, which is right behind it, coming down. We were up on the upper floors of the Verizon building looking at it. You could just see the whole bottom corner of the building was gone. We could look right out over to where the Trade Centers were because we were that high up. Looking over the smaller buildings. I just remember it was tremendous, tremendous fires going on. Finally they pulled us out. They said all right, get out of that building because that 7, they were really worried about. They pulled us out of there and then they regrouped everybody on Vesey Street, between the water and West Street. They put everybody back in there. Finally it did come down. From there - this is much later on in the day, because every day we were so worried about that building we didn't really want to get people close. They were trying to limit the amount of people that were in there. Finally it did come down." - Richard Banaciski

Larry Silverstein states that "they" made the decision to pull. This shows that he had no control over the order to pull. He merely implies that he made the suggestion to the FDNY Chief, Daniel Nigro (the fire department commander Silverstein refers to) to pull the fire teams due to "terrible loss of life". Why would Larry Silverstein only make a mere suggestion to "pull" the building if the operation had been planned? If Silverstein did tell the fire department commander to demolish the building, we find it hard to believe that the word "**maybe**" would come into play if the building was already rigged for demolition.

Larry Silverstein's "pull it" comment is by far one of the most controversial aspects of the 9/11 controversy.[129] I admit that I cannot say for sure what Silverstein really meant, but one thing that needs to be noted is that whoever Silverstein spoke with, it was not Chief Daniel Nigro.

"I am well aware of Mr. Silverstein's statement, but to the best of my recollection, I did not speak to him on that day and I do not recall anyone telling me that they did either. That doesn't mean he could not have spoken to someone from FDNY, it just means that I am not aware of it."

—Daniel Nigro [130]

Also, contrary to what the Guide states, Silverstein apparently DID make plans to demolish Building 7 on 9/11.[131]

WTC7

56:48 No plane hit Building 7. But at 5:20 p.m. on September 11th, it collapsed in a heap on the ground. Some damage to Building 7 is said to have been caused by debris from Tower 1. Though this New York Times article tells us Building 7 “burned like a giant torch,” the only visuals that exist are of unidentified smoke and a few small fires. Compare this to the wallops sustained by WTC 3 ... 4 ... 5 ... and 6:

9/11 Mysteries uses very poor wording in their assessment of the damage caused to Building 7 by the collapse of Building 1. They state, “Some damage to Building 7 is said to have been caused by debris from Tower 1”. This is not only, “said to have been”, it is a proven fact.

The damage that WTC7 sustained from the collapse of WTC1 was actually very significant. On-site reports indicate this:

<http://www.firehouse.com/terrorist/911/magazine/gz/norman.html>

“From there, we looked out at 7 World Trade Center again. You could see smoke, but no visible fire, and some damage to the south face. You couldn’t really see from where we were on the west face of the building, but at the edge of the south face you could see that it was very heavily damaged.”

There are also several images available which detail the damage sustained to WTC7:

Image -> http://images.911mysteriesguide.com/WTC7_Damage1.jpg

Image -> http://images.911mysteriesguide.com/WTC7_Damage2.jpg

Image -> http://images.911mysteriesguide.com/WTC7_Damage3.jpg

Further investigation into witness accounts reveals the extent of this damage. Keep in mind that this has all been caused by the collapse of WTC1.

<http://www.firehouse.com/terrorist/911/magazine/gz/boyle.html>

“Boyle: ...on the north and east side of 7 it didn’t look like there was any damage at all, but then you looked on the south side of 7 there had to be a hole 20 stories tall in the building, with fire on several floors. Debris was falling down on the building and it didn’t look good.

Boyle: There was a huge gaping hole and it was scattered throughout there. It was a huge hole. I would say it was probably about a third of it, right in the middle of it. And so after Visconti came down and said nobody goes in 7, we said all right, we’ll head back to the command post. We lost touch with him. I never saw him again that day.”

http://graphics8.nytimes.com/packages/pdf/nyregion/20050812_WTC_GRAPHIC/9110462.PDF

“Captain Varriale told Chief Coloe and myself that 7 World Trade Center was badly damaged on the south side and definitely in danger of collapse. Chief Coloe said we were going to evacuate the collapse zone around 7 World Trade Center, which we did.”

<http://www.cooperativeresearch.org/entity.jsp?id=1521846767-634>

“The biggest decision we had to make was to clear the area and create a collapse zone around the

severely damaged [WTC Building 7]. A number of fire officers and companies assessed the damage to the building. The appraisals indicated that the building's integrity was in serious doubt."

<http://www.firehouse.com/terrorist/911/magazine/gz/hayden.html>

"Early on, we saw a bulge in the southwest corner between floors 10 and 13, and we had put a transit on that and we were pretty sure she was going to collapse. You actually could see there was a visible bulge, it ran up about three floors. It came down about 5 o'clock in the afternoon, but by about 2 o'clock in the afternoon we realized this thing was going to collapse."

Again, I do not doubt that there was structural damage to WTC7 from the collapse of the North Tower. However, as I have already pointed out, the NIST final report on WTC7 makes it clear that the damage played little to no role in the collapse. If debunkers wish to dispute this assertion, then they must dispute it with NIST.

9/11 Mysteries mentions that the only visuals that exist show "unidentified smoke and a few small fires". The reason for the lack of images of fires can ironically be linked to the "unidentified" smoke. This smoke is the result of fires within WTC7. The entire southern face of WTC7 was literally covered in smoke. We can see this in a number of images:

Image -> http://images.911mysteriesguide.com/WTC7_Smoke1.jpg

Image -> http://images.911mysteriesguide.com/WTC7_Smoke2.jpg

Image -> http://images.911mysteriesguide.com/WTC7_Smoke3.jpg

This is why there is not much visible fire within WTC7. This much smoke cannot be produced by a "few small fires". If we look at the accounts of the brave firefighters who worked near WTC7 on 9/11, we can see clear explanations of the fire and damage at WTC7.

<http://tinyurl.com/8k3yb>

"They told us to get out of there because they were worried about 7 World Trade Center, which is right behind it, coming down. We were up on the upper floors of the Verizon building looking at it. You could just see the whole bottom corner of the building was gone. We could look right out over to where the Trade Centers were because we were that high up. Looking over the smaller buildings. I just remember it was tremendous, tremendous fires going on. Finally they pulled us out."

http://www.nytimes.com/packages/html/nyregion/20050812_WTC_GRAPHIC/Cruthers.txt

"Early on, there was concern that 7 World Trade Center might have been both impacted by the collapsing tower and had several fires in it and there was a concern that it might collapse."

Please note that all these fires burned uncontrolled for up to 6 hours.

I don't doubt there were fires, but the Guide's assertions about the smoke on WTC7's south face are demonstrably false. The Guide asserts, as many other debunkers have asserted, that the majority of smoke on WTC7's south face came from fires within the building. However, let's take a look at this smoke in relation to the building.

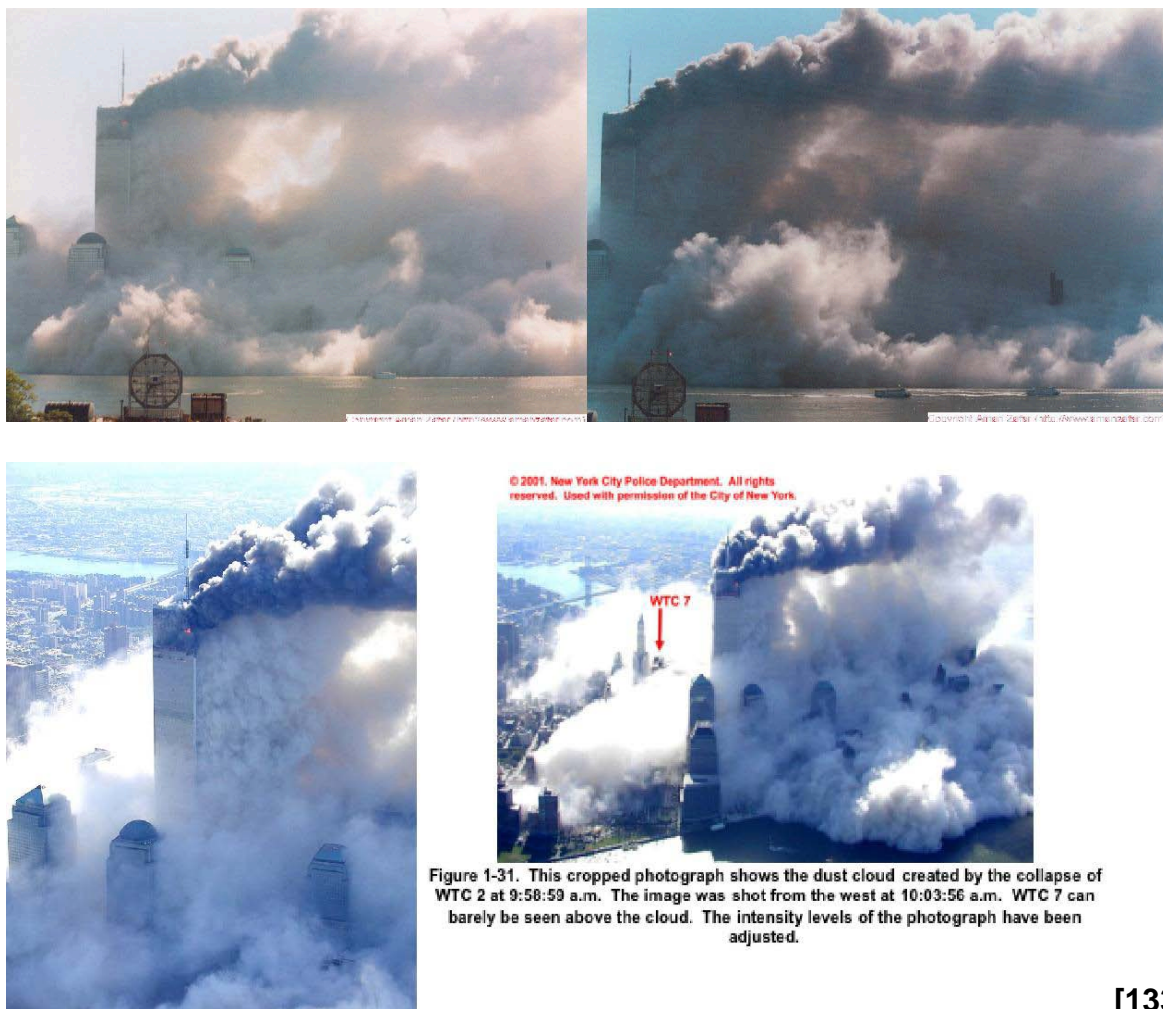


The Guide claims that this smoke is coming from the fires, but at the same time states that the reason we cannot see the fires is because the smoke is covering the majority of them. Really? All that smoke and not a single flame visible? While this picture does show smoke on the south face, video evidence does not confirm a total building “inferno” as some claim. In fact, in the next picture, we can see the upper half of the building as the smoke clears a bit to see the actual facade.



[132]

We can clearly see that the smoke was not covering any fires. So where did all this smoke come from? If we look at the above photo of Building 7, the shot from the west, we can see that while there is a large amount of smoke on the south face of the building, there is none on the west face. If the smoke really was coming from the fires, then it should be coming from every window. But there were no fires from every window, and right at the corner of the building, the smoke seems to stop. This implies that what we are actually seeing is the result of a negative low air pressure drawing smoke up from the burning WTC complex and clinging to the south side of Building 7. There is strong evidence to support this, as videos and photographs show that the exact same thing happened to WTC1 after WTC2 collapsed.



[133]

Of course, the reason the smoke and dust did not continue to cling to WTC1 was simply due to the fact that it eventually dispersed and ran out. The majority of smoke on WTC7's south face appears to have come from WTC5 or WTC6, which were burning severely and for a long time.



57:27 Positioned right below the towers, **damage to the surrounding World Trade Center buildings was infinitely worse. Still, the structures held up. But somehow rescue workers knew that Building 7 would fall.**

Firefighter 1: "Did you hear that?"

Firefighter 2: "Keep an eye on that building. It'll be coming down soon."

World Trade Center buildings 3, 4, and 5 were constructed far differently to World Trade Center 7. They were nowhere near as tall as World Trade Center 7 and had only sustained damage on the top floors.

Due to the fact that damage to WTC3, WTC4 and WTC5 was caused to the top of the structure (from falling debris), none of the buildings had any extra weight problems of the nature that would cause global collapse. As we know from examining the several quotes previously stated in this section of the guide, there was a 20-story hole in the lower southwestern section of WTC7.

9/11 Mysteries does not deal with the damage sustained from falling debris and the fire in the same context. They attempt to dissect the two occurrences into two separate events.

As we have already seen, NIST's report on WTC7 blames only the fires as the cause of Building 7's collapse. Here the Guide seems to directly contradict itself. It states the reason that the other WTC buildings did not collapse is that they lacked the "weight problems" Building 7 had. However, this implies that WTC buildings 1 and 2 should not have collapsed, as they also had damage mainly at the top. The Twin Towers had significant safety factors[134] and collapsed at a rate slower than free fall, meaning that the falling mass would have had less kinetic energy. In contrast, WTC3, for example, was impacted by heavy free falling debris from both Towers from as much as 1300 feet. The debris collapsed regions of the building spanning several floors, but was arrested by the building's steel structure, with the result that a four-storey section of WTC3 remained standing. Apparently, the debris from the two Towers did not have enough kinetic energy to collapse the structure all the way down to the ground.

World Trade Center 3



This behavior contrasts with the officially accepted story that a "progressive collapse" entirely destroyed each Twin Tower. What's more, WTC5 had far more severe fires than WTC1, 2, or 7. Numerous floors were totally engulfed, but the building remained standing.

World Trade Center 5



A few floors in WTC5 did collapse, but the way in which they collapsed also contradicts NIST's theory of progressive collapse.[135]

9/11 Mysteries also correctly states that firefighters suspected that Building 7 would collapse. What they do, though, is imply that the brave men and women serving the FDNY knew that the building was going to collapse in a controlled demolition. This is a gross misinterpretation of the testimony provided by several FDNY members after the attacks.

Firefighters raised concerns that Building 7 would collapse due to structural failure, not due to controlled demolition. The fact that 9/11 Mysteries implies that the firefighters are aware that the towers were demolished by controlled demolition, but choose to cover it up, is absurd. By taking the quotes of these first responders out of context, 9/11 Mysteries implies that these firefighters had advance knowledge of the mass murder of thousands of innocent lives. This is utterly disrespectful to those who served and died trying to save the innocent on 9/11. 343 firefighters died at the World Trade Center on September the 11th 2001. To make the assertion that their brothers were complicit in their murders is appalling and shows a serious lack of respect for the fallen.

Several quotes are available that show why the firefighters expected WTC7 to collapse. Please note that none of them states anything about a controlled demolition.
<http://www.firehouse.com/terrorist/911/magazine/gz/hayden.html>

“By now, this is going on into the afternoon, and we were concerned about additional collapse, not only of the Marriott, because there was a good portion of the Marriott still standing, but also we were pretty sure that 7 World Trade Center would collapse. Early on, we saw a bulge in the southwest corner between floors 10 and 13, and we had put a transit on that and we were pretty sure she was going to collapse. You actually could see there was a visible bulge, it ran up about three floors. It came down about 5 o'clock in the afternoon, but by about 2 o'clock in the afternoon we realized this thing was going to collapse.”

"It was a heavy body of fire in there and then we didn't make any attempt to fight it. That was just one of those wars we were just going to lose. We were concerned about the collapse of a 47-story building there."

http://graphics8.nytimes.com/packages/pdf/nyregion/20050812_WTC_GRAPHIC/9110462.PDF

"Captain Varriale told Chief Coloe and myself that 7 World Trade Center was badly damaged on the south side and definitely in danger of collapse. Chief Coloe said we were going to evacuate the collapse zone around 7 World Trade Center, which we did."

"They backed me off the rig because seven was in dead jeopardy, so they backed everybody off and moved us to the rear end of Vesey Street. We just stood there for a half hour, 40 minutes, because seven was in imminent collapse and finally did come down."

<http://tinyurl.com/8k3yb>

"They told us to get out of there because they were worried about 7 World Trade Center, which is right behind it, coming down. We were up on the upper floors of the Verizon building looking at it. You could just see the whole bottom corner of the building was gone. We could look right out over to where the Trade Centers were because we were that high up. Looking over the smaller buildings. I just remember it was tremendous, tremendous fires going on. Finally they pulled us out. They said all right, get out of that building because that 7, they were really worried about. They pulled us out of there and then they regrouped everybody on Vesey Street, between the water and West Street. They put everybody back in there. Finally it did come down. From there - this is much later on in the day, because every day we were so worried about that building we didn't really want to get people close. They were trying to limit the amount of people that were in there. Finally it did come down."

http://graphics8.nytimes.com/packages/pdf/nyregion/20050812_WTC_GRAPHIC/9110117.PDF

Then we found out, I guess around 3:00 o'clock, that they thought 7 was going to collapse. So, of course, we've got guys all in this pile over here and the main concern was get everybody out, and I guess it took us over an hour and a half, two hours to get everybody out of there. ... So it took us a while and we ended up backing everybody out, and that's when 7 collapsed.

As you can see, several firefighters made the judgment that WTC7 would collapse purely based on the structural integrity of the building.

The claim that the firefighters believed that WTC7 was going to collapse based on the structural integrity of the building appears to be incorrect. In an essay by Graeme MacQueen, it is shown that the majority of firefighters on 9/11 did NOT conclude that the building was going to collapse based on their own assessment of the building's condition.[136] His essay concludes that, of the 60 firefighters who stated that Building 7 was going to collapse, only seven appear to have personally ascertained or affirmed that the building would collapse. These seven were official superiors of the fire department. The remaining firefighters apparently stated that they believed that WTC7 was going to collapse based on not what they concluded, but what they were told by others (typically superiors). This is evident by several of the firefighter testimonies that the Guide quotes:

“Captain Varriale **told Chief Coloe and myself** that 7 World Trade Center was badly damaged on the south side and definitely in danger of collapse.”

“**They told us** to get out of there because they were worried about 7 World Trade Center, which is right behind it, coming down.”

“Then **we found out**, I guess around 3:00 o'clock, that **they thought** 7 was going to collapse.”

The Guide claims that 9/11 Mysteries asserts that the reason the firefighters had advanced knowledge of the collapse is because they were aware it would be brought down in a demolition, and were therefore either directly or indirectly involved in the destruction of the building. As far as I can tell, 9/11 Mysteries does not imply this at all. All the film states is that “somehow rescue workers knew Building 7 would fall.” We should question how these people knew the building would collapse, given that not a single high-rise skyscraper has ever collapsed due to fire. We have already seen that the majority of firefighters based this conclusion on what they were told by superiors. So the question is how these superiors themselves knew of Building 7’s destruction in advance. Did they conclude this based on their own assessment? Further research shows this to not be the case. In his essay, MacQueen points out that some unnamed engineer had apparently warned officials from the fire department about the collapse of the North Tower. MacQueen quotes FDNY Chief Peruggia:

"I was in a discussion with Mr. Rotanz and I believe it was a representative from the Department of Buildings, but I'm not sure. Some engineer type person, and several of us were huddled talking in the lobby and it was brought to my attention, it was believed that the structural damage that was suffered to the towers was quite significant and they were very confident that the building's stability was compromised and they felt that the north tower was in danger of a near imminent collapse.

I grabbed EMT Zarrillo, I advised him of that information. I told him he was to proceed immediately to the command post where Chief Ganci was located..."

MacQueen then writes:

When Zarrillo carried Peruggia’s startling news of imminent collapse to Chief Ganci, Ganci’s response was, 'who the fuck told you that?' Ganci had bet the lives of his firefighters on the stability of the Towers. In fact, the lives of hundreds of firefighters had been wagered on the experience of fire chiefs who never suspected collapse. Ganci had almost certainly been told, like Peruggia and others in the FDNY (see Appendix E), that planes could not cause the Towers to collapse. Ganci is dead—he died in the collapse of the North Tower—but his question remains a good one: Who told you that?

In my view, all three building collapses were peculiar in the extreme, and we have a perfect right to ask who determined that they were going to collapse and on what basis. We need not apologize for asking whether there might have been an 'engineer type person' who told crucial

members of the FDNY that Seven's stability was compromised, after which this warning was passed on and largely accepted by the rank and file.[137]

Nine months after publishing his article MacQueen was proven correct, as nowpublic.com pointed out:

In an Oct 15, 2008 interview with Allan Rees (following the release of the NIST WTC 7 report), Dr. Shyam Sunder (lead investigator) responded to a question about the evidence of foreknowledge of the collapse of WTC 7 by saying that they were "aware that an engineer or a technical expert or a technical advisor was providing advice to the city agencies with regard to the condition of building 7", and that they had been hearing creaking noises and the area was cleared about 2:30 pm. He refused to name this person, and then implied it may have been more than one "advisor"[138]

And similarly, warnings of Building 7's collapse had also been given to high-ranking officials in the fire department:

According to Captain Michael Currid, the Uniformed Fire Officers Association's sergeant at arms, he and other FDNY officers at some point went into WTC 7, where four or five fire companies were battling its flames, and yelled up the stairwells: "Drop everything and get out!" He did this, he said, because "[s]omeone from the city's Office of Emergency Management" had told him that WTC 7 was "basically a lost cause and we should not lose anyone else trying to save it." [139]

What we note here that is of particular interest is that someone from Giuliani's Office of Emergency Management had warned the fire department about Building 7's collapse. This is particularly interesting because, as we saw earlier, Giuliani and his men also somehow knew that the Twin Towers would collapse. It may be argued that this "engineer type person" (or possibly persons) was the one who had warned Giuliani about the Towers, which in turn caused Giuliani's office to warn the firefighters about WTC7. However, as we also saw earlier, the problem for Giuliani is that when he was confronted on the issue he lied when he said that he "didn't realize the towers would collapse." He also apparently agreed that the story of these fore-tellers of fire causing steel-framed high-rise buildings to collapse for the first time in history was dubious, as he also lied about the very existence of these individuals when he stated that, "no one that I know of had any idea they would implode. That was a complete surprise."

So the question remains: Who was this person (or persons) who warned the firefighters? These warnings had all apparently come from Giuliani's Office of Emergency Management, as confirmed by the testimony of Michael Currid regarding WTC7, and the testimony of Richard Zarillo regarding the Towers:

"As I was walking towards the Fire command post, I found Steve Mosiello. I said, Steve, where's the boss? I have to give him a message. He said, well, what's the message? I said the buildings are going to collapse; we need to evac everybody out. With a very confused look he said who told you that? I said I was just with John (Peruggia) at OEM (Office of Emergency

Management). OEM says the buildings are going to collapse; we need to get out.”
–Richard Zarillo[140]

How is it that Giuliani’s office knew that these three buildings (and ONLY these three buildings) were going to collapse? Insofar, we have not seen any satisfactory answer to this question from either the Guide or any other source.

57:48 A 47-story skyscraper, **Building 7 folded neatly, in 6-and-a-half seconds. A textbook descent right into its footprint.** Silverstein Properties now tells us that its owner was referring to the team of firefighters inside the building when he spoke of the decision to “pull.” Pulling the firemen out of harm’s way.

World Trade Center 7 did not collapse into its footprint at all. Of course, it looks that way when we see one angle of video, but photos from Ground Zero tell a completely different story.

This is a photo of WTC7’s debris spilling onto Barclay Street.

Image -> http://images.911mysteriesguide.com/WTC7_Footprint1.jpg

As you can see, quite a lot of damage was done to the surrounding structures as a result of WTC7’s collapse. Another example of such damage is 30 West Broadway Street. As you can see in the following photograph, this is not simply scratched paint or broken glass.

Image -> http://images.911mysteriesguide.com/WTC7_Footprint2.jpg

Further photographs and professional reports also detail the damage sustained to 30 West Broadway as a result of the collapse of WTC7.

Image -> http://images.911mysteriesguide.com/WTC7_Footprint3.jpg

Image -> http://images.911mysteriesguide.com/WTC7_Footprint4.jpg

Image -> http://images.911mysteriesguide.com/WTC7_Footprint5.jpg

<http://mceer.buffalo.edu/publications/wtc/02-SP02Screen.pdf>

“As WTC7 collapsed, it fell partly on an adjacent building at 30 West Broadway, causing significant damage. Beams were also permanently distorted by the impact.”

Another building to be damaged by the collapse of WTC7 was the Verizon Building at 140 West Street.

Image analysis and expert reports also detail the damage sustained to the Verizon Building by WTC7’s collapse.

<http://mceer.buffalo.edu/publications/wtc/02-SP02Screen.pdf>

“The collapse of World Trade Center 7 damaged the adjacent Verizon building.”

Large segments of the WTC 7 braced framing were lodged against the Verizon building, which also suffered notable perforations in its framing and cladding. In particular, a steel column was severely distorted, presumably by debris impact”

To claim that WTC7 “did not collapse into its footprint at all” is utterly absurd. Although Building 7 may not have completely collapsed straight down into its footprint, WTC7.net more accurately states that:

The pile was almost entirely within the footprint of the former building.[141]

Photographs show that this is most certainly true.



True, Building 7 did damage a few surrounding buildings. But this may have been due to the simple fact that WTC7 was a particularly large building. No demolition company had ever demolished a building the size of Building 7 and most likely never would have because of its size and how close it was to other buildings.



It is certainly not unheard of for buildings brought down in demolitions to fall outside their footprints.[142] But the fact remains that the majority of the debris from WTC7 ended up in the footprint of the building. The center of the pile was in the center of the building. Here is what the FEMA report had to say about the debris of Building 7:

The collapse of WTC 7 had a **small debris field** as the facade was pulled downward, suggesting an internal failure and implosion... The average debris field radius was approximately **70 feet.[143]**

9/11 Mysteries states that the WTC7 collapse time was 6.5 seconds. This may be true for the amount of time that the exterior of the building took to collapse to the ground. However, there is one very important thing that 9/11 Mysteries misses.

8.2 seconds before the collapse of WTC7, the first of two mechanical penthouses on the roof of WTC7 collapsed into the building. This is evidence of structural failure within the building more than 8 seconds before the global collapse began. There were no accompanying explosions heard or seen by anyone when this happened.

<http://www.youtube.com/watch?v=CLHwwwJCMgk>

The above video shows in detail the collapse of the penthouses.

First of all, the Guide's claim that no one heard any explosions as Building 7 collapsed is false. There were several people who have testified that they did hear explosions from the building.[144]

Second, the collapse of the east mechanical penthouse has long been a topic of discussion among debunkers. They insist that it invalidates the claim that WTC7 collapsed in 6.5 seconds. Georgewashington2.blogspot.com has addressed this topic in detail:

Government apologists have argued that WTC 7 took 13 or more seconds to collapse, thus disproving the "virtual free fall" argument. However, this argument entirely misses the point. Why? Because the videos show that the penthouse collapsed *long before* the main building. In fact, everyone admits that there was a delay of several seconds between the collapse of the penthouse and the collapse of the rest of the building.

"[An object at rest tends to stay at rest.](#)" So once the movement stopped, it should have *stayed* stopped.

Therefore, the collapse of the main portion of building 7 - several seconds after the collapse of the penthouse stopped - should be treated as a discrete and new event (see discussion below).

Since the main building collapsed in approximately 7 seconds - [the same time as a controlled demolition takes](#) - that is strong evidence that WTC 7 was in fact demolished.

[G]overnment apologists will argue that alot was going on inside WTC 7 between the end of the collapse of the penthouse and the beginning of the collapse of the main building. They have provided no evidence for that argument. Indeed, if there had been significant movement inside the building after the collapse of the penthouse, this should have resulted in some movement or deformation of the building visible from outside.[145]

This point about the collapse of the east penthouse causing damage or deformation to the outside of the building has also been noted by physical chemist Dr. Frank Greening. In his comments on NIST's WTC7 draft report, Dr. Greening highlighted a significant problem with NIST's simulations of WTC7's collapse in regard to the collapse of the penthouse.

According to NIST, the global collapse of WTC 7 began 6.9 seconds after the East Penthouse collapse or about 23 seconds into the simulation. Now consider NIST's Figures 12-66, 12-67 and 12-69 and in particular the images showing the alleged state of the core 17.5, 19.5, 20.7, 21.8, 24.1, 26.8 and 28.8 seconds into the collapse simulation. These images represent NIST's view of what the core looked like at ~1-2 second intervals following the collapse of the East Penthouse. What is most significant about these images is that around the time of global collapse initiation NIST's simulation shows that the eastern half of the core had completely collapsed while the western half of the core remained standing and relatively undamaged. This is quite remarkable since videos of the collapse of WTC 7 show that up to *and well beyond* the moment that the roofline of WTC 7 exhibited its first downward movement, the exterior of the building revealed absolutely no signs of NIST's proposed partial collapse of the core even though the core was connected to the exterior walls of Building 7 by dozens of horizontal beams on every floor.[146]

It's worth noting that Dr. Greening does support the official story of 9/11, and therefore cannot be accused of being a "conspiracy nut."

In the above mentioned post from georgewashington2.blogspot.com, mechanical engineer Tony Szamboti adds:

The WTC 7 East penthouse had columns on its perimeter and none in its interior. On three sides these columns mounted near the edge of the roof of WTC 7. It is unlikely that a collapse of any core columns of the main building could have pulled them completely down without the roof beams breaking completely loose from the exterior columns and moving down completely also.

It is unlikely that the roof beams were severed from the exterior columns, which is what would be necessary for a core collapse to cause the penthouse to collapse.

In other words, had the initial collapse of the penthouse been caused by a collapse of the core of the main building, the rest of the roof would have collapsed at the same time as the penthouse. Because it didn't, this is strong evidence that the collapse of the penthouse and the collapse of the main building were wholly separate events.

58:13 However, there **WERE** no firefighters in Building 7, according to FEMA, N.I.S.T. and fire chief Frank Fellini. They were ordered out at 11:30 that morning. Six hours later, the

building came down.

Eyewitness: “You know, we heard this -- this sound -- it sounded like a clap of thunder. Turned around, and it looked like there was a shockwave ripping through the building -- and the windows all busted out. It was horrifying. About a second later, the bottom floor caved out -- and the building followed after that.

NIST does not state that firefighters were ordered out of WTC7 at 11:30 in the morning. In fact, this is what they state:

<http://wtc.nist.gov/pubs/NISTNCSTAR1-81.pdf>

“No accurate time is available for these actions during the WTC 7 operations; however, the sequence of event indicates that it occurred during a time period from 12:30 p.m. to approximately 2:00 p.m.

At approximately 5:20 p.m., some three hours after WTC 7 was abandoned the building experienced a catastrophic failure and collapsed.”

Several firefighters on the scene reported being pulled out of the building and surrounding areas much closer to the collapse time than 11:30am.

http://www.nytimes.com/packages/html/nyregion/20050812_WTC_GRAPHIC/Ryan_William.txt

“Then we found out, I guess around 3:00 o' clock, that they thought 7 was going to collapse. So, of course, we've got guys all in this pile over here and the main concern was get everybody out, and I guess it took us over an hour and a half, two hours to get everybody out of there...”

<http://www.firehouse.com/terrorist/911/magazine/gz/hayden.html>

“We pulled everybody back probably by 3 or 3:30 in the afternoon. We said, this building is going to come down, get back. It came down about 5 o'clock or so, but we had everybody backed away by then.”

Firefighters were in, and in close proximity to, WTC7 up until 2:30 – 3:30PM. This is when the “pull it” order was issued and firefighters were ordered to pull back from the building.

The time in which the firefighters were moved away from WTC7 differs more extensively than the Guide implies. Chief Daniel Nigro said:

“[A]pproximately an hour and a half after that order [to move away] was given... 7 World Trade Center collapsed completely.”[147]

This would mean that the collapse zone was established at about 3:50 PM. Firefighter Kevin McGovern, however, put it earlier, saying:

“It took about three hours [after the order] for Seven World Trade Center to actually come down”[148]

This would have meant the building was evacuated at about 2:20 PM. Similarly, Captain Robert Sohmer said the evacuation occurred at around this time.

“I would say approximately maybe 2:00 roughly, where we started to operate and then they asked us to fall back again due to the potential of 7 World Trade Center collapsing.”[149]

Chief Frank Fellini, one of the men who made the decision, put the time even earlier, saying:

“So for the next five or six hours we kept firefighters from working anywhere near that building, which included the whole north side of the World Trade Center complex.”[150]

This would mean that the collapse zone was established at about noon.

In NIST’s Final report on the collapse of WTC7, they stated that the decision was made “at approximately 2:30 PM.”[151]

Larry Silverstein himself gave a time in which the evacuation occurred. In response to a question from a We Are Change group in March 2008, Silverstein stated that the decision to pull was made “around 3:30 or 4:00 PM.”[152] We have already seen that Chief Daniel Nigro did not speak to Silverstein on 9/11, and was therefore not the firefighter who could have given this time to Silverstein. This adds further problems to Silverstein’s “pull it” comment because, if NIST’s time frame is the correct one (which is likely, given the average time stated by numerous firefighters), then Silverstein would definitely not have been told the evacuation occurred at “around 3:30 or 4:00 PM.”

58:44 Radio host **Alex Jones notes the mark of a classic implosion:**

9/11 Martial Law - Alex Jones: **“This is a photo taken one second into Building 7’s collapse. Notice the ‘crimp.’ If we look at other controlled demolitions, we see that they first ‘blow’ one of the central columns, so the building falls in on itself. If you don’t do this, the building falls outward, and can damage surrounding structures. Building 7 had a classic ‘crimp,’ or ‘wedge.’ Its central column was blown out first, so it didn’t structurally damage buildings just a few feet away from it.”**

Alex Jones’ ‘crimp’ is located on the eastern side of WTC7. This just happens to be where the mechanical penthouse collapsed into WTC7 8.2 seconds before the collapse.

The preliminary NIST report into WTC7 indicates that the failure of these columns was caused by the following:

<http://wtc.nist.gov/pubs/WTC%20Part%20IIC%20-%20WTC%207%20Collapse%20Final.pdf>

“NIST continues to evaluate the factors that could have caused column 79, 80, or 81 to fail

Possible contributing factors include:

- Damage to components adjacent to truss #2 from debris impact
- Damage to fireproofing from normal activities prior to event or debris damage

▫ Unusual fuel loads (fuel lines, high density of building contents)”

NIST’s team of qualified scientists did consider the controlled demolition hypothesis for the destruction of WTC7. They did not find any evidence to support this theory.

The reason that NIST found no evidence to support the controlled demolition theory is because they never looked for evidence of demolition. In NIST’s FAQ on the Twin Towers, they explicitly stated that they never looked for residues of explosives or incendiaries.

Did the NIST investigation look for evidence of the WTC towers being brought down by controlled demolition? Was the steel tested for explosives or thermite residues? The combination of thermite and sulfur (called thermate) "slices through steel like a hot knife through butter."

NIST did not test for the residue of these compounds in the steel.

The responses to questions number 2, 4, 5 and 11 demonstrate why NIST concluded that there were no explosives or controlled demolition involved in the collapses of the WTC towers.

Furthermore, a very large quantity of thermite (a mixture of powdered or granular aluminum metal and powdered iron oxide that burns at extremely high temperatures when ignited) or another incendiary compound would have had to be placed on at least the number of columns damaged by the aircraft impact and weakened by the subsequent fires to bring down a tower. Thermite burns slowly relative to explosive materials and can require several minutes in contact with a massive steel section to heat it to a temperature that would result in substantial weakening. Separate from the WTC towers investigation, NIST researchers estimated that at least 0.13 pounds of thermite would be required to heat each pound of a steel section to approximately 700 degrees Celsius (the temperature at which steel weakens substantially). Therefore, while a thermite reaction can cut through large steel columns, many thousands of pounds of thermite would need to have been placed inconspicuously ahead of time, remotely ignited, and somehow held in direct contact with the surface of hundreds of massive structural components to weaken the building. This makes it an unlikely substance for achieving a controlled demolition.

Analysis of the WTC steel for the elements in thermite/thermate would not necessarily have been conclusive. The metal compounds also would have been present in the construction materials making up the WTC towers, and sulfur is present in the gypsum wallboard that was prevalent in the interior partitions.

911research has this to say in response:

NIST's argument against [thermite having been used in demolition](#) supposes that thermite was the only method used, which makes the NIST's argument essentially a straw-man.

More important, NIST's assertion that "thermite burns slowly" is highly misleading, because it ignores the existence of [fast-reacting forms of thermite](#) such as nano-thermites, which are just as explosive as conventional high explosives, and pack about three times as much energy into a given volume. NIST's misdirection here appears particularly disingenuous, since the institute has [extensive involvement in research into energetic nano-thermites](#).**[153]**

Indeed, NIST's refusal to test for explosive residues was also evident in their investigation into the collapse of WTC7.

Is it possible that thermite or thermate contributed to the collapse of WTC 7?

NIST has looked at the application and use of thermite and has determined that its use to sever columns in WTC 7 on 9/11/01 was unlikely. Thermite is a combination of aluminum powder and a metal oxide that releases a tremendous amount of heat when ignited. It is typically used to weld railroad rails together by melting a small quantity of steel and pouring the melted steel into a form between the two rails.

To apply thermite to a large steel column, approximately 0.13 lb of thermite would be needed to heat and melt each pound of steel. For a steel column that weighs approximately 1,000 lbs. per foot, at least 100 lbs. of thermite would need to be placed around the column, ignited, and remain in contact with the vertical steel surface as the thermite reaction took place. This is for one column. Presumably, more than one column would have been prepared with thermite, if this approach were to be used.

It is unlikely that 100 lbs. of thermite, or more, could have been carried into WTC 7 and placed around columns without being detected, either prior to Sept. 11 or during that day.

Given the fires that were observed that day, and the demonstrated structural response to the fires, NIST does not believe that thermite was used to fail any columns in WTC 7.

Analysis of the WTC steel for the elements in thermite/thermate would not necessarily have been conclusive. The metal compounds also would have been present in the construction materials making up the WTC buildings, and sulfur is present in the gypsum wallboard used for interior partitions.**[154]**

Notice that NIST used the exact same excuse in both FAQs. They believed their analysis would not have been necessarily conclusive because of the similar materials in the debris that are also in thermite. We have already seen that this argument has been invalidated by physical experiments. NIST also felt it was "unlikely" that thermite could have been placed in the building without detection. Needless to say, this is not a scientific reason against the controlled demolition hypothesis. Eric Lawyer, a Seattle firefighter and the founder of Firefighters for 9/11 Truth, in addressing NIST's excuse for not looking into a thermite/thermate

demolition scenario, has pointed out that one reason you DO consider a theory is if the task is difficult accomplish.

“I’ve been on a lot of fire scenes and I’ve seen a lot of investigations. Why would we not test because something’s hard to do? That’s the exact reason you need to investigate it. If that was hard to do, we need to find out how they did it.” -Eric Lawyer [155]

At most, all NIST did was test what they called “scenarios of a hypothetical blast event that could have occurred in WTC 7 on September 11, 2001.”[156] However, although NIST speaks of “scenarios” in the plural, it actually discusses only one scenario. NIST wrote:

In particular, a plausible scenario with the minimum amount of required explosive was identified.[157]

This requirement would best be fulfilled, according to NIST, by RDX explosives.

The lowest mass of explosive needed to sever any of the six column or truss sections was found to be 4 kg (9 lb) of RDX explosives in linear shaped charges.[158]

And by limiting their scenario to only include RDX, NIST dismissed the controlled demolition theory by stating that no blast sounds were heard. The explosion of nine pounds of the RDX materiel, NIST says:

[W]ould have resulted in a sound level of 130 to 140 decibels (a sound level consistent with a gunshot blast or a jet plane that is 10 to 20 decibels louder than a rock concert in front of speakers), at a distance of at least half a mile (if unobstructed by surrounding buildings...).[159]

As we previously saw, according to the NFPA 921 guide, the actual “sound” of an explosion does not define the criteria of an explosion. So, having ruled out thermite based on an unscientific reason, NIST ruled out any demolition scenario based on a scenario entirely created by them involving RDX. In much the same way NIST used a straw-man argument in their investigation into the collapse of the Twin Towers—supposing that thermite was the only substance used—NIST has now developed another straw-man argument for WTC7, by supposing that RDX was the only substance that could have been used. This is altogether a thoroughly unscientific way of investigating the collapse of WTC7.

Alex Jones makes specific mention of the reason for “blowing” the column. He states that the reason for this is so WTC7 “didn’t structurally damage buildings just a few feet away from it”. This is the reason why columns are blown in a controlled demolition. However, previous analysis shows us that surrounding structures were severely damaged. Please see the previous sections of this chapter (WTC7) for this analysis.

In reference to blowing the column, Alex Jones states, “if you don’t do this, the building falls outward, and can damage surrounding structures”. However, WTC did lean outwards as it fell. The following images indicate WTC7 leaning to the South as it collapses.

Image -> http://images.911mysteriesguide.com/WTC7_Tilt1.jpg

Image -> http://images.911mysteriesguide.com/WTC7_Tilt2.jpg

As I have already shown, leans often happen in controlled demolitions. Take for example the demolition of the Landmark Tower in Texas.



[160]

The lean that the Landmark Tower exhibited is comparable to the lean that Building 7 exhibited.



[161]

Admittedly, citing only the crimp as an indication of controlled demolition does not greatly help 9/11 Mysteries’ case. Although crimps (or “kinks”) are common features of controlled demolitions[162], there are several other features of

Building 7's collapse that are even more obvious indicators of demolition, including:

- **The collapse started from the bottom.**
- **The onset of the collapse was sudden.**
- **The collapse was total.**
- **The building fell in a near-symmetrical fashion.**
- **Its acceleration approximated that of a free-falling object.**
- **Most of its concrete was pulverized into huge dust clouds.**
- **The debris from the building ended up in a fairly small pile almost entirely within its footprint.**
- **Jets of dust and debris (squibs) shot out of the building right as it collapsed.**
- **Explosions were reported by people near the building as it collapsed.**

59:19 Remember **the Mayor's emergency bunker?** Ensconced on the 23rd floor of Building 7, it was retrofitted with super-glass, water, oxygen and its own generator. But **Mayor Giuliani chose to find emergency shelter elsewhere on September 11th.**

WTC7 was in the same complex as WTC1 and WTC2. Basic logic would lead people to the conclusion that camping out in the same area as the attack would be a bad idea.

From reading this chapter of the Viewers Guide, we know that WTC7 suffered impacts from segments of WTC1, creating an enormous hole in the bottom corner of the building. We also know that the building was on fire for 6 hours, and eventually collapsed.

Does that sound like a good place to take shelter?

Furthermore, as far as Giuliani knew, WTC7 could also have been a target of a hijacked aircraft.

Giuliani leaving the command center is in fact very odd when one considers that the center was designed precisely for terrorist attacks. Giuliani's Office of Emergency Management on the 23rd floor received 15 million dollars worth of renovations, including independent and secure air and water supplies, and bullet and bomb resistant windows designed to withstand 200 MPH winds.[163]

The renovations were most likely due to the 1993 bombing of the WTC. The 1993 bombing must have been part of the rationale for the command center, which overlooked the Twin Towers, a prime terrorist target. How curious that on the day of the attack, Giuliani and his entourage set up shop in a different headquarters, abandoning the special bunker designed precisely for such an event.

The Guide's claim about the damage Building 7 sustained and the ensuing fires is irrelevant, since Giuliani left the OEM long before either Tower collapsed.

59:39 Why Building 7? Even the media and its experts were confused. The History Channel interviews **structural engineer Ramon Gilsanz, who points out the obvious crimp and even speaks of the “implosion.”**

Narrator: “Engineers are not just focusing on the Twin Towers. The most disturbing structural event [sic] was not that the Twin Towers fell, but that Tower 7, ignited by flying debris, fell due to fire alone.”

Gilsanz: “Building 7 was a steel-framed building, and it’s the first steel-framed building that has collapsed due to fire. The failure of the building was an implosion. It failed completely different from Towers 1 and 2, in which the floors failed first.”

Ramon Gilsanz is a qualified structural engineer. What 9/11 Mysteries fails to realize is the simple fact that Gilsanz still supports the official story even after pointing out the crimp and “implosion”. Please note that the context in which Gilsanz says “implosion” in does not indicate a controlled demolition.

So now, you are probably asking how we know that Gilsanz supports the official story. Well, Ramon Gilsanz is actually one of the hundreds of engineers working on the NIST reports. None of which conclude that any kind of controlled demolition occurred on 9/11.
http://wtc.nist.gov/solicitations/wtc_awardR0028.htm

“All three founding Partners, Mr. Ramon Gilsanz, Mr. Philip Murray, and Mr. Gary Steficek, will be involved in this project. Mr. Gilsanz will act as the Principal for the project team.”

This is just one example of the several professionals that 9/11 Mysteries uses in their film, who do not support the assertions of the film.

There are several other professionals, however, that do support the film’s conclusions on WTC7.

Hugo Bachmann and Jörg Schneider, both emeritus professors of structural analysis and construction at the Swiss Federal Institute of Technology, have stated that, in their opinion, WTC7 was “with great probability” professionally demolished.[164]

Jack Keller, emeritus professor of engineering at Utah State University (who had been named by *Scientific American* as one of the world’s leaders in using science and technology to benefit society) has said that “Obviously it was the result of controlled demolition.”[165]

Danny Jowenko, a controlled demolition expert in the Netherlands with his own firm, has stated that the building was a controlled demolition, saying that “It’s without a doubt a professional job. They know exactly what they’re doing.”[166] When asked a year later if he stood by his comments, he replied “Absolutely... I looked at the drawings, the construction and it couldn’t be done by fire... absolutely not.”[167]

1:00:22 Why Building 7? Let's ask the question again. As the WTC command center, **was it the hub for the 9/11 plan?** ... Also, In 6-and-a-half seconds, **lost forever were thousands of SEC case files on corporate fraud, including those relating to the notorious activities of giants Worldcom and Enron.** A few indictments for stock fraud, but what of the \$70-billion-dollar California electricity swindle? **It disappeared.**

9/11 Mysteries provides very poor motives for the destruction of WTC7. The first motive is insurance fraud on the part of Larry Silverstein. That has already been debunked in this chapter of the Viewer's Guide.

The second motive suggested by 9/11 Mysteries involves case files for corporate fraud. If WTC7 was destroyed to destroy case files, consider this. Nearly 3,000 people died on 9/11, none of them in WTC7. Flying Flight 77 into the Pentagon, crashing Flight 93 into a field in Pennsylvania, and even flying Flight 175 into WTC2, did nothing to assist in destroying case files.

There would have been several easier ways to destroy these files. One plane into WTC7 would have presumably caused minimal casualties and done sufficient damage to destroy the files. According to conspiracy theorists, the files could have even been destroyed without any mass event. Conspiracy theorists claim that bombs were placed in WTC7. To do this, high-level access to the structure would have been needed to place charges within the building. Why not just use this access to steal and destroy the files?

Consider this: If the files had simply disappeared and been destroyed in a conventional way, then there could have been an investigation into their disappearance. It would certainly seem odd if thousands of files just disappeared for no good reason. But after 9/11, there was no mystery as to why the files were destroyed. That reason was obvious: the building they were in was totally destroyed. And the reason for the building's destruction was brushed off as simply a building destroyed in the chaos of a mass terrorist attack.

Several hard drives were recovered from the rubble. Information was successfully recovered from several of these drives.

<http://archives.cnn.com/2001/TECH/industry/12/20/wtc.harddrives.idg/>

"The company has completed processing 39 drives; another 42 have arrived, and a further 20 drives are expected in early January, Wagner said."

The 9/11 Commission also investigated this issue extensively, trying to discover any information that would suggest foreknowledge of the attacks. There was no information found to indicate any kind of foreknowledge of the attacks.

http://www.9-11commission.gov/staff_statements/911_TerrFin_Monograph.pdf

Pages 145-152

Admittedly, the claims about thousands of SEC case files being lost are dubious given the likelihood that the SEC had off-site backups. The important thing is that the loss of WTC 7 gave the SEC an excuse to shelve the cases. And the other

tenants in WTC7 were very suspicious, with offices of the CIA, Secret Service, and IRS.[168]

Tower Security and Evacuation

1:03:53 Who was a director in the company that **provided electronic security for the World Trade Center and Washington's Dulles Airport – both involved in September 11th? None other than the president's younger brother.**

1:04:09 **From 1996 to 2000, Securacom installed what was referred to as “a new security system” at the World Trade Center. Wirt D. Walker III, a cousin of the Bush brothers, was CEO of Securacom from 1999 until 2002. Interestingly, these facts have not been made public. Was it only a security system that was added during those years ... or was it also the wiring for a long-awaited plan?**

This is a classic example of the several lies we are told when watching 9/11 Mysteries. There are several obvious mistakes in the film, but this is one of the deliberate “errors”.

http://www.washingtonspectator.com/articles/20050215bushes_3.cfm

“Securacom got the \$8.3 million World Trade Center security contract in October 1996 and received about \$9.2 million from the WTC job from 1996 (a quarter of its revenues that year) to 1998. **But in 1998, the company was "excused from the project" because it could not fulfill the work, according to former manager Al Weinstein, and the electronic security work at the WTC was taken over by EJ Electric, a larger contractor.**”

9/11 Mysteries says that Securacom had the WTC contract up until 2000. Legitimate sources appear to show that 9/11 Mysteries is lying. The Securacom deal ended in 1998 – 3 years before 9/11.

Marvin Bush was still involved in a company that had business related to 9/11 though. However, upon looking into the details of this connection, this only damages the case provided to us by 9/11 Mysteries. Marvin Bush was an adviser to HCC insurance.
http://www.washingtonspectator.com/articles/20050215bushes_3.cfm

“Bush left Stratesec after 1999 but currently remains an adviser to HCC Insurance. **HCC lost \$29 million at 9/11, largely from World Trade Center property losses, medical payouts in New York City, and workers' compensation reinsurance losses.**”

This leaves us wondering why Marvin Bush would be involved in an event that caused a company he was affiliated with to lose \$29,000,000USD.

Next up is the Wirt D. Walker III connection. 9/11 Mysteries claims that Wirt D. Walker III is a cousin of the Bush family. This is categorically false. Wirt Dexter Walker III is a descendant of Wirt Dexter Walker, a Chicago railroad tycoon. He is not descended from George Herbert Walker, the St. Louis banker, who is the great-grandfather of President Bush. Despite the

similarity of names, Stratesec is the only connection between the families.

The burden of proof is on 9/11 Mysteries to prove that Wirt D. Walker III is actually a cousin of the Bush brothers. They do not attempt to prove this, and do not even show a photo of him. In our research, the only sites we found that cite this connection do not provide any sources and all appear to be conspiracy theory websites. We found little information in general about Wirt D. Walker III. However, Wikipedia does say this:

http://en.wikipedia.org/wiki/Wirt_Walker

“Walker is the great-grandnephew of his namesake Wirt D. Walker (1860-1899), a successful railroad entrepreneur and philanthropist from Chicago who became blind and helped found the Art Institute of Chicago. They are descended from James M. Walker of New Hampshire. Although frequently cited as a cousin of Marvin Bush, who is a descendant of George Herbert Walker of St. Louis, there is no connection between the families.”

9/11 Mysteries states that the information they contain in their film “has not yet been made public”. This is yet another example of a falsehood in the film. Are we supposed to believe that 9/11 Mysteries somehow gained classified information and contained it in their film? Personally, we would rather trust reliable sources. Using publicly available information, we have shown how 9/11 Mysteries has misled its viewers on several occasions.

Finally, 9/11 Mysteries speculates that the security deal was in place so the planners of 9/11 could wire the building for demolition. They speculate that “the wiring for a long awaited plan” was installed as opposed to, or along with, a new security system. They provide no evidence whatsoever to back their claims up.

It is beyond the scope of this essay to deal with the possible means of access to the security of the WTC. Detailing that would require an entire other essay. This, in fact, has already been done. Chemist Kevin Ryan has set forth a detailed explanation for possible means of demolition access to the WTC buildings.[169] As I said at the beginning of this essay, the science should ultimately decide if the buildings were destroyed through controlled demolition.

There is also no need to address the Guide’s criticism of Scott Forbes’ account of a “power down” in WTC2[170], as I agree that the story lacks any coherent corroboration.

1:06:30 Ben Fountain of Fireman’s Fund spoke of **unusual evacuations ordered at the Twin Towers during the weeks before September 11th**. Others reported that the **security alert was inexplicably lifted five days prior**, and **bomb-sniffing dogs were removed**. **What would the dogs have discovered had they remained on duty?**

Two weeks before 9/11, extra security was called in as a response to several phone-in threats. This security was removed five days prior to 9/11 due to the absence of further threats.

9/11 Mysteries makes the assertion that the evacuations that took place within the towers before 9/11 occurred so that demolition workers could do their work. 9/11 Mysteries implies that during these evacuations, a controlled demolition was fully, or partially prepared. This would involve demolition crews entering the building undetected, stripping walls surrounding the cores

and perimeter columns, placing thousands of pounds of explosives on these columns, wiring the explosives together, hiding the explosives, replacing the walls surrounding the cores and perimeter columns and, finally, making sure they didn't leave any mess right before leaving completely undetected. Keep in mind that these evacuations were very brief.

In the hypothetical scenario that bombs were placed within the World Trade Center in the days leading up to 9/11, sniffer-dogs within the towers, without a doubt, would have detected the explosive devices. This is the reason that this section of 9/11 Mysteries severely damages its own case. Why, you ask? Because not **all** bomb sniffing dogs were removed before 9/11. Only **extra** security that was operating at the World Trade Center was removed. The security level never went below normal levels.

<http://www.portauthoritypolicememorial.org/sirius.htm>

"Police K9 **Sirius was a bomb detection dog with the Port Authority of New York and New Jersey Police Department.** He and his handler, Police Officer David Lim, were assigned to the World Trade Center, where they often searched hundreds of trucks and vehicles each day, as part of America's "War on Terrorism." Sirius was the only police dog **killed by the terrorists on September 11th** and, perhaps, the only American police dog ever killed by international terrorists."

<http://www.novareinna.com/bridge/sirius.html>

"Sirius, along with his partner, Police Officer David Lim, were assigned to the World Trade Center in New York, where their primary duty was to check vehicles entering the Complex, clear unattended bags and sweep areas for VIP safety."

Sirius did not discover any explosives leading up to 9/11. If the thousands of pounds of explosives that would have been needed to bring the towers down in a controlled demolition were placed in the towers, Sirius would have detected them. This alone is proof that no explosives were inside the World Trade Center before 9/11. This is especially true for the basements of the towers, where Sirius spent the morning of 9/11 and where, sadly, he died.

Contrary to what the Guide claims, bomb-sniffing dogs would not necessarily have detected explosives in the buildings.[171] A bomb-sniffing dog expert and trainer was contacted and asked about what the dogs are trained to smell. He stated that Lackland AFB lists the explosives that the military trains their dogs on, so ultimately anyone with intelligence connections could get that list, and know how to get around it. He also stated that bomb-sniffing dogs are not trained to detect every type of possible explosive, as there are countless possible formulations.

"There are hundreds of thousands of explosives, and quite honestly we do about 16."**[172]**

Licorice Steel

1:10:49 Asbestos plays a part in the myth of why the Twin Towers fell on September 11th.

Official Story narrator: "The steel had been sprayed with lightweight fireproof foam which, while cheaper, was much less adhesive. The New York Times has reported that the foam fell off easily, and the Port Authority had been fixing and replacing missing sections in the months before September 11th. But even if the fireproofing had been perfectly applied, the impact of the plane crashing into the North Tower was so powerful, it simply blew most of it off -- allowing the fire to attack the steel beneath."

James Glanz: "Once the planes hit, whatever condition it was in before the fact made no difference because an impact would knock it off, and the fire would have devastating effects on the steel."

1:11:40 **One good smack from a jet plane and the puffs of asbestos are all blown off the steel. Would a few hundred doors slamming do the same thing?**

The speed of impact of AA Flight 11 was 470 mph = 689 ft/s.

The speed of impact of UA Flight 175 was 590 mph = 865 ft/s.

The kinetic energy released by the impact of AA Flight 11 was
= $0.5 \times 395,000 \times (689)^2/32.174$
= 2.914 billion ft lbs force (3,950,950 Kilojoules).

The kinetic energy released by the impact of UA Flight 175 was
= $0.5 \times 395,000 \times (865)^2/32.174$
= 4.593 billion ft lbs force (6,227,270 Kilojoules).

If "a few hundred" doors all slammed at the exact same time, in a localized area of one of the Twin Towers, significantly less amounts of energy (compared to the plane impacts) would be generated.

The energy would not disperse much further than the doorframes of each door, and would certainly not reach the asbestos coating the steel columns of the Twin Towers. More importantly, all the doors would have to be shut at the exact same time with extreme force to cause any noticeable movement effects on the structure.

9/11 Mysteries is hailed as a "scientific investigation into 9/11" by conspiracy theorists. This is despite the fact that the creators of the film possess no scientific knowledge and fail at even the most basic principles of science. Even a physics student in the 10th grade could tell you that a

plane impact would have far more of an effect on a structure's fireproofing than a "few hundred doors slamming".

Once again, the Guide appears to be quoting the FEMA report on the speeds the planes were flying. Therefore, the amount of energy the Guide gives also appears to be incorrect. For example, NIST claims that there was 2500 MJ of kinetic energy from plane that hit WTC1. 2500 MJ comes out to around 2,500,000 kilojoules, not 3,950,950 as the Guide states. Perhaps the author of this Guide—"the Doc,"—should actually have looked at the correct report. In any case, there is strong evidence that the impact of the planes may not have been able to widely dislodge the fireproofing. More on this will be discussed below.

1:12:47 **40 years ago, the steel used to build the World Trade Center was certified by Underwriters Laboratories**, a global product-compliance and public-safety guardian. Let's hear **a lone voice that spoke out from this enormous company.**

The claim that UL certified the steel in the World Trade Center is a claim that Kevin Ryan often makes, and 9/11 Mysteries echoes. However, simple research into this claim quickly shows it to be false.

<http://www.mindfully.org/Reform/2004/Kevin-R-Ryan22nov04.htm>

"But his allegations drew a sharp rebuke from UL, which said Ryan wrote the letter "without UL's knowledge or authorization." The company told The Tribune "there is no evidence" that any firm tested the materials used to build the towers.

"UL does not certify structural steel, such as the beams, columns and trusses used in World Trade Center," said Paul M. Baker, the company's spokesman."

On one hand, we have 9/11 Mysteries claim that Underwriters Laboratories specifically certified the steel used in the World Trade Center, and on the other, we have UL and NIST stating that this claim is false. There is simply no evidence to suggest that UL certified the steel used in the construction of the World Trade Center, and the company has no reason to deny doing so. The NIST FAQ even attends to this claim:

http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

"UL did not certify any steel as suggested. In fact, in U.S. practice, steel is not certified at all; rather structural assemblies are tested for their fire resistance rating in accordance with a standard procedure such as ASTM E 119 (see NCSTAR 1-6B). That the steel was "certified ... to 2000 degrees Fahrenheit for six hours" is simply not true."

Please keep in mind that this is not simply poor research; it is another deliberate lie on the part of 9/11 Mysteries.

Admittedly, the issue of whether or not Underwriters Laboratories actually certified the WTC steel is a debatable topic of discussion.[173]

1:12:47 Kevin Ryan: "My name is Kevin Ryan and **I was formerly a manager at Underwriters Laboratories**. I was fired from my job five days after sending a letter to a government scientist

at the NIST, questioning the report that the NIST had recently released in October of 2004. I wrote this letter because I had serious questions about what I saw in the report. Those questions went back to September of 2001 when U.L.'s CEO came to our location in South Bend. **He told our entire staff the World Trade Center steel had been certified by U.L.,** and he said that we should be proud of how long the buildings had stood.

Kevin Ryan was never directly employed by Underwriters Laboratories. He was an employee of Environmental Health Laboratories, which is not, as Ryan claimed, a division of UL. Environmental Health Laboratories is merely affiliated with UL. Kevin Ryan's job was testing the water.

Source:

Paul M. Baker Manager, Media Relations
Underwriters Laboratories, Inc.
Northbrook, Ill., USA
Paul.M.Baker(@)us.ul.com

"UL's Fire Protection Division has assisted NIST in its investigations regarding the collapse of the WTC towers. However, Mr. Ryan was not involved in that work and was not associated in any way with UL's Fire Protection Division, which conducted testing at NIST's request. Rather, Mr. Ryan was employed in UL's water testing business, Environmental Health Laboratory, in South Bend, Indiana."

Kevin Ryan has never worked in a division of UL responsible for steel, fire protection, structural engineering, or any field that relates to the events of 9/11.

For more information on UL and Kevin Ryan's steel certification claim, please see the previous section of this chapter of the 9/11 Mysteries Viewer's Guide (section 2.21.2).

1:12:47 Over the next two years, I did some research and found some very disturbing facts, including that **the steel had been disposed of in an unprecedented manner.** Once I discovered those facts, I sent a written question the U.L.'s CEO asking him about these things and what he was doing to protect our reputation as a company. **He replied in writing to me that U.L. did, in fact, test the steel. He talked about the quality of the sample and how well it had performed in the tests, and he said that our company had tested the steel, and it had done beautifully.**

[Text: **Test models did not fail**]

Kevin Ryan speculates that the steel in from the World Trade Center was quickly removed to cover up any evidence of controlled demolitions. What Mr. Ryan does not realize is that several pieces of the World Trade Center steel are actually housed at the JFK international airport.
<http://www.papba.org/media/abc/abc-060907-hangar.html>

"Among the most treasured of the ruins is a 62-ton column. It is the last piece of wreckage to be removed from the site and will likely form the centerpiece of the museum at Ground Zero. It is what is left of four floors, compressed into just three feet."

True, that is only one column out of the whole debris field. However, the 80,000 square foot hangar also contains 13 perimeter columns, sections of the towers' bases and sections of the massive core structure.

This picture shows us one of the core columns that are located at the hangar.

Image -> http://images.911mysteriesguide.com/jfk_column_s.jpg

Steel from the World Trade Center was sold to foreign nations. There was nothing “unprecedented” about the way it was sold. Kevin Ryan continues to talk about the tests performed by UL and NIST on the performance of the structural steel from the World Trade Center. The steel did perform well in the test. However, Ryan also makes the false assertion that simply because the steel performed well in the test, the towers should not have collapsed. http://wtc.nist.gov/media/wtc_fire_test.htm

“The Commerce Department's National Institute of Standards and Technology (NIST) plans to sponsor a fire test of a World Trade Center (WTC) tower floor system as part of its building and fire safety investigation of the WTC disaster. The test will be conducted under contract by Underwriters Laboratories in Northbrook, Illinois, on Wednesday, Aug. 25, 2004. The test of a typical WTC floor system and individual steel members will be conducted under the fire conditions prescribed in the ASTM E119 standard test”

As you can see, the NIST tested individual steel members and a typical floor system. What Ryan fails to mention is what the NIST concluded from the results of these tests, which were included in their final collapse report. http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

“Based on this comprehensive investigation, NIST concluded that the WTC towers collapsed because: (1) the impact of the planes severed and damaged support columns, dislodged fireproofing insulation coating the steel floor trusses and steel columns, and widely dispersed jet fuel over multiple floors; and (2) the subsequent unusually large jet-fuel ignited multi-floor fires (which reached temperatures as high as 1,000 degrees Celsius) significantly weakened the floors and columns with dislodged fireproofing to the point where floors sagged and pulled inward on the perimeter columns. This led to the inward bowing of the perimeter columns and failure of the south face of WTC 1 and the east face of WTC 2, initiating the collapse of each of the towers. Both photographic and video evidence—as well as accounts from the New York Police Department aviation unit during a half-hour period prior to collapse—support this sequence for each tower.”

The manner in which the steel was removed from Ground Zero was in fact unprecedented. The Guide is correct in stating that some of the steel has been saved at JFK international airport. What the Guide fails to mention is that the hangar where these steel sections are being kept is off-limits to the public. What's more, the locations of these pieces within the towers suggests a reason they were allowed to be preserved. The large core column sections stood on the Towers' foundations, seven stories below street level, and the perimeter column trees were from the lobby level, just above street level. How interesting that the pieces that were kept just happened to be the ones that were not subjected to the total dismemberment that the rest of the Towers were subjected to. These lower sections of the Towers were spared the blasting that shredded the steel frames down to about their fourth stories. This is evident from the fact that 18 people survived in the lower reaches of the North Tower's core, and fragments of the perimeter walls of each Tower remained standing.[174]

As for the removal of the rest of steel, the recycling operation occurred as FEMA

was conducting their own investigation. The team FEMA had assembled to investigate the failures -- the Building Performance Assessment Team (BPAT) -- was denied access to the evidence.[175]

The Science Committee of the House of Representatives later identified several aspects of the FEMA-controlled operation that prevented the conduct of an adequate investigation:

- The BPAT did not control the steel. "The lack of authority of investigators to impound pieces of steel for investigation before they were recycled led to the loss of important pieces of evidence."
- FEMA required BPAT members to sign confidentiality agreements that "frustrated the efforts of independent researchers to understand the collapse."
- The BPAT was not granted access to "pertinent building documents."
- "The BPAT team does not plan, nor does it have sufficient funding, to fully analyze the structural data it collected to determine the reasons for the collapse of the WTC buildings." [176]

The manner in which the steel was handled was so irresponsible that Bill Manning of *Fire Engineering Magazine* stated that the investigation and the clean-up was a "half-baked farce." [177]

The tests NIST conducted actually had nothing to do with their final theory of what caused the collapse of the Towers. NIST's testing of the floor systems was used to test the "pancake theory" of collapse. Because the floor systems did not fail in the tests, NIST abandoned the theory in place of their "inward bowing theory." The results of these tests, if anything, actually contradicts NIST's final conclusions on the collapse of the Twin Towers. NIST's tests showed that the floor models sagged only a few inches in the middle of the decking after being exposed to 2000°F fires for two hours. However, NIST's computer models showed as much as 42 to 55 inches of sagging! [178]

1:12:47 After that, he asked me to be patient and wait for the NIST report because UL was working closely with them.

[Text: NIST FINAL REPORT ON WTC COLLAPSES, OCTOBER 2004, 10,000 pages, 16 million, 3 year study]

I saw this report in October of 2004, and in November I sent my letter to NIST asking for clarification. I felt it was an obligation on my part to ask the questions since no one else seemed to care to. After the 1993 bombing, the fireproofing in both buildings was updated considerably. But **when you look at the NIST report, you don't see any testing that showed that a 767 would widely dislodge the fireproofing under any impact, let alone so far from the point of impact.**

Contrary to Ryan's claim, the NIST did show testing that clearly demonstrated that a 767 would widely dislodge the fireproofing during the aircraft impacts of 9/11.

<http://patapsco.nist.gov/ImageGallery/details.cfm?imageid=109>
http://www.nist.gov/public_affairs/techbeat/04BFRL003_Carino_WTCfireproofingLR.jpg

“NIST research structural engineer Nicholas Carino describes laboratory tests used to estimate the amount of fireproofing that was dislodged from various structural elements within the WTC buildings when the aircraft were flown into them on Sept. 11. The specimens shown include steel bars and plates that have been coated with the same type and depth of sprayed fire-resistive material as was used in the WTC buildings.”

Section 1-6A of the NIST report into the collapse of the World Trade Center is 326 pages long. This whole section is dedicated to demonstrating that a 767 impact would widely dislodge the fireproofing in the towers. Perhaps Kevin Ryan missed this section of the report:
<http://wtc.nist.gov/NISTNCSTAR1-6A.pdf>

In the WTC towers, where the debris fields were larger than the dimensions of steel components (i.e., such as trusses, beams, and columns), these tests show that SFRM would have been dislodged from a wide range of debris sizes and speeds. The test results support the assumption that, within the debris field created by the aircraft impact into WTC1 and WTC 2, the SFRM used for thermal insulation of structural members was damaged and dislodged.”

Kevin Ryan is clearly mistaken in his thesis. The NIST report states in almost the exact same words that Ryan used, precisely that which Ryan claims they did not.

What the Guide does not seem to realize is that this is another example of NIST’s own tests contradicting their conclusions. Kevin Ryan has actually gone into great detail about why NIST’s tests actually suggest that the fireproofing could not have been widely dislodged.[179] But even if the fireproofing was widely dislodged, does this necessarily mean the buildings were doomed to collapse? Absolutely not. Standard fireproofing in buildings is only good for up to 2-3 hours. However, there are numerous high-rise skyscrapers that have burned for well over 5 hours and have not collapsed. WTC1 burned for, at most, 102 minutes, and WTC2 burned for, at most, 56 minutes. WTC7 did burn for about 6-7 hours, but, according to NIST, it kept the majority of its fireproofing.

1:12:47 **So now we’ve been left with a new theory, which is not really a theory at all, but only a collection of vague statements.**

[Text: Dr. Frank W. Gayle of NIST with WTC steel specimen]

The NIST report represents what can really only be called anti-science. They started with their conclusions, and worked their way back to some leading hypothesis.

Kevin Ryan calls the NIST report a “collection of vague statements”. This “collection of vague statements” is available for anyone to read, and is 10,000 pages long. The NIST report is a result of the work of:
http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

“Some 200 technical experts—including about 85 career NIST experts and 125 leading experts from the

private sector and academia—reviewed tens of thousands of documents, interviewed more than 1,000 people, reviewed 7,000 segments of video footage and 7,000 photographs, analyzed 236 pieces of steel from the wreckage, performed laboratory tests and sophisticated computer simulations of the sequence of events that occurred from the moment the aircraft struck the towers until they began to collapse.”

Kevin Ryan has not, to date, had any of his work regarding 9/11 published in a respected peer-reviewed scientific journal.

There is no evidence available to suggest that NIST started with a conclusion and worked back to a hypothesis. This is merely a baseless accusation made by Kevin Ryan, for which he has failed to provide any evidence. The burden of proof is on Ryan to back up his claims, and he has failed to do so.

We will first note that the Guide’s claim about Kevin Ryan not having any work related to 9/11 in peer-reviewed journals is now false, as he is the co-author of three peer-reviewed papers regarding 9/11. Secondly, there is evidence to suggest that NIST started with a conclusion in their investigation. Kevin Ryan has noted that Shankar Nair, a contributor to the NIST investigation, stated on September 19, 2001 that, "Already there is near-consensus as to the sequence of events that led to the collapse of the World Trade Center." [180] And this was certainly the case for NIST’s investigation into the collapse of WTC7. NIST, in their final report on the collapse of WTC7, wrote that:

The challenge was to determine if a fire-induced floor system failure could occur in WTC 7 under an ordinary building contents fire.[181]

Why would NIST have assumed that this was “the challenge?” Why would NIST limit their hypotheses to fires having brought Building 7 down? Why would NIST, already knowing that buildings such as WTC7 can be brought down with explosives—and indeed that this is the only way in which such buildings have ever been caused to collapse—have asked if a collapse caused by an ordinary building fire “could occur?” As Dr. Steven Jones has written:

The likelihood of near-symmetrical collapse of WTC 7 due to random fires (the “official” theory)—requiring as it does near-simultaneous failure of many support columns—is infinitesimal.[182]

Whereas “infinitesimal” probability means virtually zero probability, a structural engineer, Kamal Obeid, has claimed the probability of NIST’s theory to be, simply, zero, saying that the failure of a few connections bringing down the entire structure is “an impossibility.” [183] Scott Grainger, a forensic fire protection engineer, has also noted the absurdity of NIST’s theory, stating that, because the fires were obviously not burning on every floor simultaneously and thus scattered throughout the building, the fires would have eventually burned themselves out and would not have sustained a source of heat to cause collapse, much less a near-symmetric collapse. [184]

It is clear that NIST's theory of "fire-induced progressive collapse" is an incredibly unlikely scenario. And it is also clear that this was the only theory they took seriously and thus started their investigations with this theory. But the question remains: why would NIST start with a theory so obviously unlikely?

1:12:47 When **the results of the physical tests showed the temperatures were far too low to soften steel, and that the floors could not have collapsed, and that the fireproofing could not have been widely dislodged**, the NIST ignored these results and **built a black-box computer model that no one could argue with and that they know would spit out the right answers**.

Earlier in this chapter, we have demonstrated that the NIST **clearly** detailed exactly how fireproofing was dislodged from the Twin Towers.

Ryan also claims that NIST tests showed that the temperatures within the towers were far too low to soften steel. Ryan is wrong again.

http://wtc.nist.gov/pubs/factsheets/faqs_8_2006.htm

"Normal building fires and hydrocarbon (e.g., jet fuel) fires generate temperatures up to about 1,100 degrees Celsius (2,000 degrees Fahrenheit). NIST reported maximum upper layer air temperatures of about 1,000 degrees Celsius (1,800 degrees Fahrenheit) in the WTC towers (for example, see NCSTAR 1, Figure 6-36)."

However, when bare steel reaches temperatures of 1,000 degrees Celsius, it softens and its strength reduces to roughly 10 percent of its room temperature value. Steel that is unprotected (e.g., if the fireproofing is dislodged) can reach the air temperature within the time period that the fires burned within the towers. Thus, yielding and buckling of the steel members (floor trusses, beams, and both core and exterior columns) with missing fireproofing were expected under the fire intensity and duration determined by NIST for the WTC towers."

The statement that all of NIST's conclusions are derived from a computer simulation is laughable. NIST conducted hundreds of interviews, reviewed thousands of photographs and videos, conducted metallurgical investigations, strength, heating and structural analysis, in addition to their computer simulation. The simulation was not designed to gather results, but rather to display them.

We saw earlier that NIST's physical tests DID show that the temperatures were low. The Guide is simply quoting a section from NIST's FAQ on the WTC investigation without citing what their tests actually showed. The tests NIST conducted showed that none of the samples had reached temperatures hot enough to soften or weaken steel. To date, NIST has not provided any physical evidence to show that the temperatures in the Towers could have reached 1800°F. As we saw earlier, Dr. Thomas Eagar has explained that hydrocarbon fires generally do not reach the maximum temperature of 1800°F. And it's worth noting that if this were true for the fires in the Towers, it most certainly would have been true for the fires in WTC7. NIST looked at absolutely no samples of steel from WTC7 in their investigation yet made their own calculations based on computer models. NIST's report on WTC7 claims that the maximum temperature the steel reached was 675°C (1247°F). However, scientists on both sides of the argument have shown these temperatures to be huge overestimates. Kevin Ryan, having

noted NIST claims that the collapse of WTC7 was initiated by the temperature of five floor beams that had reached 600°C (1100°F), has written that:

[R]aising those five floor beams to a temperature of 600 °C would require an enormous amount of energy, far more than was available from the burning of the office furnishings underneath the floor beams.[185]

Dr. Frank Greening likewise has rejected the view that the fires in WTC7 could have heated the floor beams to 600°C (1100°F), even expressing doubt that the fires could have heated them much above 300°C (570°F).

NIST's collapse initiation hypothesis requires that structural steel temperatures on floors 12/13 significantly exceeded 300°C [570°F]--a condition that could never have been realized with NIST's postulated 32 kg/m² fuel loading.[186]

NIST has provided absolutely no credible evidence to show that the fires in any of the WTC buildings could have reached the temperatures they claim the fires reached.

1:15:53 The steel, in dragon-like lengths and contortions, spoke for itself.

1:15:58 **Bent, deformed, without cracks ...**

Construction worker: "I found it hard to believe that it actually bent because of the size of it and how there's no cracks in the iron. **It bent without almost a single crack in it. It takes thousands of degrees to bend steel like this.**"

Architect Mark Wagner: "**Typically you'd have buckling and tearing on the tension side -- but there's [sic] no [sic] buckling at all.**"

Steel has a modulus of 29.9×10^6 psi.

This is the slope of the stress/strain curve. A36 steel has a yield strength of 36,000 psi. This means it starts bending at about 0.1% strain. It fractures at about 7-8% strain.

Strain is measured in (deflection/original length). It is dimensionless.

When $P = \text{Force/Area} > 36,000$ psi, steel bends permanently. If the steel is warm, that value goes down, and the steel will bend farther without fracturing.
(Thanks to rguinn @ the JREF forum)

9/11 Mysteries seems to think that not only could explosives cause this damage without buckling or cracking the metal, but also that the forces provided by the collapsing structure could not. The simple fact here is that the structure collapsing provides much more energy than a shaped charge. In the earlier sections of the film, 9/11 Mysteries claimed that shaped charges were used in conjunction with thermite to bring the World Trade Center buildings down. The truth is, for steel to be bent in a "horse shoe" fashion, something much larger than a shaped charge is needed. By this, we mean something that could not be simply hidden from office

workers, microphones of nearby cameras upon detonation, and that could certainly not be hidden from seismographs.

The claim that the forces provided by the intense heat within the towers - in conjunction with the collapse of the structures - caused steel to bend and deform at the World Trade Center, is far more plausible and far more believable than the vague and unsupported notion of pre-planted explosives presented by 9/11 Mysteries.

The problem the Guide fails to address is how the steel could have been heated hot enough to cause it to bend without buckling or cracking. As we have already seen, there is no evidence to suggest that any of the steel had been heated to over 1000°F. I don't doubt that the steel was crushed by the fall of the Towers, but as the construction worker pointed out, it takes several thousand degrees to bend steel with cracking the iron.

1:16:25 Here is “the meteorite” – molten iron fused with concrete

Architect Bart Voorsanger: “**And architects, engineers, people who work with steel, welders, have just have never seen the level of destruction and the level of deformation of this material in our lives.**”

9/11 Mysteries shows us a picture of a meteorite. It offers no comparison between the meteorite and the damage at the World Trade Center. This point seems completely detached from the rest of the film and we have no idea why the filmmakers included it.

This “meteorite” is in fact very significant, because it shows previously molten iron and concrete fused together, something that could be caused by a thermite reaction. Therefore, the information regarding the meteorite would not be “completely detached” from the film.

Furthermore, 9/11 Mysteries claims that a meteorite is “iron fused with concrete”. Perhaps they do not know that concrete is a man made substance, and does not exist in outer space. Meteorites are composed mainly of iron and silicate-based rocks.

This sort of criticism from the Guide shows the true absurdity of its arguments. Obviously the film is not saying that the object is literally a meteorite, but that it clearly resembles one.

We are also shown a comment by architect Bart Voorsanger. He states that several other people in his field “have never seen the level of destruction and the level of deformation of this material” in their lives. However, it is only logical that these men have never seen this level of destruction in their lives. 9/11 was the first time in history that a 110-story mega-skyscraper has ever collapsed as the result of an airliner impact.

What the Guide completely ignores is the fact that in order for iron to have been melted, it would have to have been heated to at least 2800°F. Not to mention the fact that it was fused with concrete. Debunkers have argued that this and other “meteorites” are simply floor sections compressed together from the collapse of

the Towers. However, some of these “meteorites” are not just steel and iron fused with concrete, but are even ordinary objects fused with molten concrete.



This is a photo of a “meteorite” at the New York Police Museum that shows firearms from WTC6 fused with concrete. The label in the background reads as follows:

Gun Encased in Concrete and Gun-Casing Remains

The U.S. Customs House stored a large arsenal of firearms at its Six World Trade Center office. During recovery efforts, several handguns were found at Ground Zero, including these two cylindrical gun-casing remains and a revolver embedded in concrete. **Fire temperatures were so intense that concrete melted like lava around anything in its path.[187]**

1:17:19 Explosives also deform steel. As they fire, gas pushes outward. **The force of the gas can easily bend a large steel column.**

Explosives can deform steel. However, the shaped charges that 9/11 Mysteries identifies as the “culprit” earlier in the film, **cut** steel.

In demolitions, shaped charges are used to fire a directional blast at a single column. Never does any demolition company use explosives that will provide so much power they can deform, twist and compact other sections of steel.

9/11 Mysteries claims that the “force of the gas can easily bend a large steel column”. No calculations, sources, or evidence are provided to back up this assertion. Rather, it is based purely on speculation.

However, the immense heat from a thermite reaction could very well have deformed the steel if used to weaken the steel.

1:17:34 Two kinds of debris. Huge shattered beams that could break a truck, combined with matter that was near pulverized.

Firefighter Joe Casaliggi: "You have two 110-story office buildings. You don't find a desk, you don't find a chair, you don't find a telephone, a computer. The biggest piece of a telephone I found was half of the keypad, and it was about this big."

1:18:22 In 1886, four gold miners lost their lives in an underground explosion. The bodies of these four men were brought to the surface in one barrel. The biggest piece recovered was part of a foot.

1:18:22 September 11th left over 1100 bodies unaccounted for.

For explosives to have played a greater role than the collapse of the building in destroying its contents, forces greater than the force of 110-stories of falling structure would need to have been provided by explosives.

How is this possible when not one person reported seeing any kind of explosive device before, during or after 9/11? No explosions were picked up on seismograms, and no explosive residue was contained in the dust at Ground Zero.

Seeing as how 9/11 Mysteries has completely ignored the ability of a falling 100 story building to destroy and mangle objects, we can only assume they are claiming that explosives, rather than the falling structure, are responsible for both:

- a) a lack of remains; and
- b) deformed steel.

The Guide's claim about seismographs detecting explosions is somewhat misleading. This assertion contrasts with this description of the Aladdin Hotel demolition:

But with the charges positioned above ground instead of within the crust ... the Aladdin implosion didn't even register on the nearby seismograph at the University of Nevada, Las Vegas, according to geology professor Dave Weide.**[188]**

Seismographs would not necessarily have detected any explosions from the Towers. A demolition's seismic signature, like its other aspects, is a function of its design. Staggering the detonation of hundreds of charges over time would minimize explosives-induced ground vibrations, which would probably be eclipsed in any case by the relief of strain as tens of thousands of tons of mass of the Towers' upper sections were severed from their bases, and by the much larger vibrations caused by rubble hitting the ground.

Also, the Guide should have actually read what medical examiners and investigators actually said about the remains of the victims. According to the coroner, many of the bodies were apparently "vaporized."

Three months after the Sept. 11 attacks, World Trade Center victims' families are being forced to face the ghastly possibility that many of the dead were "vaporized," as the medical examiner put it, and may never be identified.[189]

The fires were limited to small parts of the buildings. How did the collapse of the buildings vaporize thousands of bodies? It takes exposure of a body to 1400-1800 degrees F for at least two hours to cremate a body.[190]

The sheer amount of explosives that would be required to cause this is not an amount that could be hidden within an occupied office building.

9/11 Mysteries makes no attempt to concede that the falling structure would have pulverized humans, soft materials (dry-wall, concrete. etc) and office materials. They simply blame explosives for destroying everything within the Twin Towers. Our argument is that the amount of explosives that would be required to do that could not be hidden before, during and after their detonations.

And I argue that this is not a coherent scientific argument against the controlled demolition theory.

The next few sections of the Guide do not need refuting, as they deal with more accounts of Scott Forbes and William Rodriguez that are uncorroborated.[191]

1:24:48 **Kevin Cosgrove**, trapped on the 105th floor of the South Tower:
Kevin Cosgrove: "Smoke – real bad – 105, Two Tower. It's really bad, it's black, it's arid. My wife thinks I'm all right. I called and said I was leaving the building, I was fine, and then – bang! Three of us – two broken windows. Oh, God!"

1:25:23 Let's not forget these people, whose fate on this day was decided for them.

1:25:31 As we know, secrets cannot be kept forever.

The 9/11 recording of Kevin Cosgrove's last words was first played at the trial of Zacarias Moussaoui in 2006.

This court case proved beyond reasonable doubt that al Qaeda was responsible for the attacks of 9/11, and Moussaoui was sentenced to life in prison.

Kevin Cosgrove was a claims vice president of Aon Corporation. His body was found within a week of the attacks and he was buried on September 22nd 2001 in St. Patricks Cemetery in Huntington, New York. We will never forget. Rest in peace.

As hard as it obviously is for the author of the 9/11 Mysteries Viewer's Guide to understand, the conviction of those believed to be responsible for the attacks does nothing to refute the science which shows that the Twin Towers and World Trade Center 7 were destroyed through controlled demolition.[192]

Conclusions

The 9/11 Mysteries Viewer's Guide has not presented a convincing case that shows that the major claims of 9/11 Mysteries are incorrect. The Guide does refute several claims that are genuinely errors made by the film, but has not refuted the film's overall conclusions: that the World Trade Center was destroyed with pre-planted explosives. Below are several useful links that are wonderful and accurate sources for 9/11 related research, and refute numerous claims made by so-called "debunkers."

Websites:

[Debunking the Debunkers of the 9/11 Truth Movement](#): The all-around best website for exposing the numerous lies and errors made by debunkers.

[911Research](#): Jim Hoffman's extensive research into the events of September 11th, 2001.

[911Review](#): A Resource for Understanding the 9/11/01 Attack

[WTC7.net](#): A site devoted to examining the mysterious collapse of World Trade Center 7.

[The Journal of 9/11 Studies](#): A site that provides scholarly essays and articles that examines every aspect of the 9/11 attacks.

[Architects and Engineers for 9/11 Truth](#): Over 1000 architectural and engineering professional from around the world have concluded that the WTC buildings were destroyed through controlled demolition.

[Scholars for 9/11 Truth and Justice](#): A group of scholars and supporters endeavoring to address the unanswered questions of the September 11, 2001 attack through scientific research and public education.

[Firefighters for 9/11 Truth](#): A non-partisan association of firefighters and affiliates created to increase public awareness and demand a real investigation into the 9/11 attacks that follows National Standards.

[Scientists for 9/11 Truth](#): A group of scientific professionals who are calling for a new independent investigation into the events of September 11, 2001.

Critiques of Official Reports:

[Building a Better Mirage: NIST's 3-Year \\$20,000,000 Cover-Up of the Crime of the Century, by Jim Hoffman](#)

[The FEMA WTC Building Performance Study](#)

[The NIST WTC Investigation--How Real Was The Simulation?, by Eric Douglas](#)

[Falsifiability and the NIST WTC Report: A Study in Theoretical Adequacy, by Anonymous and Dr. Frank Legge](#)

[The NIST WTC 7 Report: Bush Science reaches its peak, by Kevin Ryan](#)

[Public comments on the NIST WTC 7 draft report. Submitted to NIST 09/11/08, by Jonathan Cole P.E.](#)

[Scientists, Scholars, Architects & Engineers respond to NIST](#)

[Comments on the Draft Report NIST NCSTAR 1-9: "Structural Fire Response and Probable Collapse Sequence of World Trade Center Building 7", issued by NIST August 21st, 2008 \(Revised and Extended Version of Comments Issued September 11th 2008\) by Dr. Frank Greening](#)

[The NIST Analyses: A Close Look at WTC 7, by Ronald H. Brookman, SE](#)

Peer reviewed papers regarding 9/11:

Active Thermite Material Discovered in Dust from the 9/11 World Trade Center Catastrophe, by Niels H. Harrit, Jeffrey Farrer, Steven E. Jones, Kevin R. Ryan, Frank M. Legge, Daniel Farnsworth, Gregg Roberts, James R. Gourley and Bradley R. Larsen

Environmental anomalies at the World Trade Center: evidence for energetic materials, by Kevin R. Ryan, James R. Gourley, and Steven E. Jones

Fourteen Points of Agreement with Official Government Reports on the World Trade Center Destruction, by Steven E. Jones, Frank M. Legge, Kevin R. Ryan, Anthony F. Szamboti, James R. Gourley

'Discussion of "What Did and Did not Cause Collapse of WTC Twin Towers in New York" by Bazant, Le, Greening and Benson,' by Anders Björkman

'Discussion of "Mechanics of Progressive Collapse: Learning from World Trade Center and Building Demolitions" by Zdeněk P. Bažant and Mathieu Verdure,' by James Gourelly

'Discussion of "Progressive Collapse of the World Trade Center: A Simple Analysis" by K.A. Seffen,' by Dr. Crockett Grabbe

Recommended videos and films:

[Loose Change Final Cut](#)

[Fabled Enemies](#)

[9/11: Press for Truth](#)

[In Their Own Words](#)

[9/11 Blueprint for Truth](#)

[Improbable Collapse: The Demolition of our Republic](#)

[Debunking 9/11 Debunking: Controlled Demolition IS Possible](#)

9/11 Un-debunked: [Version 1](#) [Version 2](#)

[The Ultimate proof NIST is lying about WTC7](#)

[NIST Report on WTC7 debunked and exposed!](#)

9/11 Science vs. Conspiracy Theories [Part 1](#) [Part 2](#)

[World Trade Center 7: An Engineered Collapse](#)

[NIST Lies: Final Report on World Trade Center Building Seven](#)

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- [16] I can be contacted either here: adam132342@hotmail.com or here:
<http://www.youtube.com/user/citizenfor911truth1>
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http://www.journalof911studies.com/articles/Article_5_118Witnesses_WorldTradeCenter.pdf

[50] 118 Witnesses, page 54

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<http://www.youtube.com/watch?v=m3CFIRVMs8g>

[52] 118 Witnesses, page 55

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[178] This point is further discussed by Steven Jones in this video:

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[179] Kevin Ryan has explained this point meticulously in his presentation "A New Standard for Deception":

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