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Anyone familiar with the 'Holocaust-Shoah' rubbish will have no difficulty relating to David Ray Griffin's musings about 9/11 and the believers in the official 9/11 conspiracy theory.

Left-Leaning Despisers of the 9/11 Truth Movement: Do You Really Believe in Miracles?

By David Ray Griffin

Global Research, July 6, 2010

An Open Letter to Terry Allen, Noam Chomsky, Alexander Cockburn, David Corn, Chris Hayes, George Monbiot, Matthew Rothschild, and Matt Taibbi.¹

According to several left-leaning critics of the 9/11 Truth Movement, some of its central claims, especially about the destruction of the World Trade Center, show its members to be scientifically challenged. In the opinion of some of these critics, moreover, claims made by members of this movement are sometimes unscientific in the strongest possible sense, implying an acceptance of magic and miracles.

After documenting this charge in **Part I** of this essay, I show in **Part II** that the exact opposite is the case: that the official account of the destruction of the World Trade Center implies miracles (I give nine examples), and that the 9/11 Truth Movement, in developing an alternative hypothesis, has done so in line with the assumption that the laws of nature did not take a holiday on 9/11. In **Part III**, I ask these left-leaning critics some questions evoked by the fact that it is they, not members of the 9/11 Truth Movement, who have endorsed a conspiracy theory replete with miracle stories as well as other absurdities.

I The Charge that 9/11 Truth Theories Rest on Unscientific, Even Magical, Beliefs

Several left-leaning critics of the 9/11 Truth Movement, besides showing contempt for its members, charge them with relying on claims that are contradicted by good science and, in some cases, reflect a belief in magic. By "magic," they mean miracles, understood as violations of basic principles of the physical sciences.

For example, Alexander Cockburn, who has referred to members of the 9/11 Truth Movement as "9/11 conspiracy nuts,"³ quoted with approval a philosopher who, speaking of "the 9-11 conspiracy cult," said that its "main engine . . . is . . . the death of any conception of evidence," resulting in "the ascendancy of magic over common sense, let alone reason."⁴ Also, Cockburn assured his readers: "The conspiracy theory that the World Trade Centre towers were demolished by explosive charges previously placed within them is probably impossible."⁵ With regard to Building 7 of the World Trade Center, Cockburn claimed (in 2006) that the (2002) report by FEMA was "more than adequate."⁶

Likewise, George Monbiot, referring to members of the 9/11 Truth Movement as "fantasists," "conspiracy idiots," and "morons," charged that they "believe that [the Bush regime] is capable of magic."⁷

Matt Taibbi, saying that the "9/11 conspiracy theory is so shamefully stupid" and referring to its members as "idiots," wrote with contempt about the "alleged scientific impossibilities" in the official account of 9/11; about the claim that "the towers couldn't have fallen the way they did [without the aid of explosives]"; of the view (held by "9/11 Truthers") that "it isn't the plane crashes that topple the buildings, but bombs planted in the Towers that do the trick"; and of "the supposed anomalies of physics involved with the collapse of WTC-7." He had been assured by "scientist friends," he added, that "[a]ll of the 9/11 science claims" are "rank steaming bullshit."⁸

Chris Hayes, writing in *The Nation* in 2006, did not stoop to the kind of name-calling employed by Cockburn, Monbiot, and Taibbi. Also, he knew, he admitted, of "eyewitness accounts of [people] who heard explosions in the World Trade Center." And he was aware that "jet fuel burns at 1,500 degrees Fahrenheit [whereas] steel melts at 2,500." He asserted, nevertheless, that "the evidence shows [a 9/11 conspiracy] to be virtually impossible," so that the 9/11 Truth Movement's conspiracy theory is "wrongheaded and a terrible waste of time."⁹

Noam Chomsky has also declared that the available facts, when approached scientifically, refute the 9/11 Truth Movement. Speaking of evidence provided by this movement to show that 9/11 "was planned by the Bush Administration," Chomsky declared: "If you look at the evidence, anybody who knows anything about the sciences would instantly discount that evidence."¹⁰ In spite of his dismissive attitude, however, Chomsky in 2006 gave some helpful advice to people who believe they have physical evidence refuting the official account:

"There are ways to assess that: submit it to specialists . . . who have the requisite background in civil-mechanical engineering, materials science, building construction, etc., for review and analysis. . . . Or, . . . submit it to a serious

journal for peer review and publication. To my knowledge, there isn't a single submission."¹¹

In *These Times* writer Terry Allen, in a 2006 essay entitled "The 9/11 Faith Movement," assured her readers that "the facts [do not] support the conspiracists' key charge that World Trade Center buildings were destroyed by pre-positioned explosives."¹²

In an essay posted at AlterNet a few months after 9/11, David Corn used a purely a priori argument to demonstrate – at least to his own satisfaction – that 9/11 could not have been an inside job: "U.S. officials would [not have been] . . . good [capable] enough, evil enough, or gutsy enough."¹³ In 2009, after having been silent about 9/11 for the intervening years, he addressed the issue again. Referring to "9/11 conspiracy silliness," "9/11 conspiracy poison," and "9/11 fabulists," Corn declared:

"The 9/11 conspiracy . . . was always a load of bunk. You don't have to be an expert on skyscraper engineering . . . to know that [this theory] make[s] no sense."¹⁴

Corn thereby implied that, whereas anyone can know that the 9/11 Truth Movement's conspiracy theory is false, those people who are "expert[s] on skyscraper engineering" would have even more certain knowledge of this fact.

As to how people (such as himself) who are not experts on such matters could know this movement's conspiracy theory to be "a load of bunk," Corn again employed his three-point a priori argument, as re-worded in a later essay, according to which the Bush administration was "not that evil," "not that ballsy," and "not that competent."¹⁵ Corn even referred to his three-point argument as "a tutorial that should persuade anyone that the 9/11 theory makes no sense." Although this "tutorial" does not, of course, convince members of the 9/11 Truth Movement, Corn explained this fact by saying: "I have learned from experience that people who believe this stuff are not open to persuasion."¹⁶

In any case, although his argument against the inside-job theory was almost entirely a priori, he did make the above-mentioned suggestion that one's a priori certitude would be reinforced by people, such as "expert[s] on skyscraper engineering," who have relevant types of expertise to evaluate the empirical evidence.

A fuller statement of the general claim made by these authors – that the 9/11 Truth Movement is based on unscientific claims – was formulated by Matthew Rothschild, the editor of *The Progressive*. In an essay entitled "Enough of the 9/11 Conspiracy Theories Already," Rothschild wrote:

"Here's what the conspiracists believe: 9/11 was an inside job. . . . [T]he Twin Towers fell not because of the impact of the airplanes and the ensuing fires but because [of] explosives. Building 7, another high-rise at the World Trade Center that fell on 9/11, also came down by planted explosives. . . . I'm amazed at how many people give credence to these theories. . . . [S]ome of the best engineers in the country have studied these questions and come up with perfectly logical, scientific explanations for what happened. . . . At bottom, the 9/11 conspiracy theories are profoundly irrational and unscientific. It is more than passing strange that progressives, who so revere science on such issues as tobacco, stem cells, evolution, and global warming, are so willing to abandon science and give in to fantasy on the subject of 9/11."¹⁷

However, in spite of the confidence with which these critics have made their charges, the truth is the complete opposite: It is the official account of the destruction of the World Trade Center, which has been endorsed by the National Institute of

Standards and Technology (NIST), that is profoundly unscientific (partly because it ignores a massive amount of evidence pointing to use of explosives¹⁸), and it is precisely for this reason that the 9/11 Truth Movement has come up with an alternative explanation – namely, that the WTC buildings were brought down in the procedure known as "controlled demolition."

II Miracles Implied by NIST's Explanation of the WTC's Destruction

The main reason why NIST's theory of the destruction of the World Trade Center is profoundly unscientific is that it cannot be accepted without endorsing miracles, in the sense of violations of fundamental principles of physics and chemistry. I will demonstrate this point in terms of nine miracles implied by NIST's accounts of the destruction of Building 7 of the World Trade Center (WTC 7) and the Twin Towers (WTC 1 and 2).

1. The Fire-Induced Collapse of WTC 7: An Apparent Miracle

WTC 7 was a 47-story building that, although it was not hit by a plane, came down at 5:21 PM that day. Unlike the collapse of the Twin Towers, the collapse of this building was not publicized. The 9/11 Commission Report, for example, did not even mention it.¹⁹ Many people have, accordingly, never heard of this building's collapse. A Zogby poll in 2006, for example, found that 43 percent of the American people were still unaware that a third WTC building had collapsed, and even though NIST's report on its collapse appeared in 2008, many people today still do not know that this building also came down.²⁰ For the purposes of the present essay, in any case, the main point is that, insofar as people profess belief in the official account of this building's collapse as articulated by NIST, they imply an acceptance of several miracles.

I begin with a fact about WTC 7's collapse that at least appears to entail a miracle: that it was (according to the official account) the first steel-frame high-rise building in the known universe to be brought down solely by fire. The Twin Towers were hit by airliners, so the official account could attribute their collapses to the airplane impacts as well as to the ensuing fires. But WTC 7 was not hit by a plane, so its collapse apparently had to be attributed to fire alone.

The unprecedented nature of a fire-induced collapse of a steel-frame high-rise building was expressed a couple of months after 9/11 by New York Times reporter James Glanz. Calling the collapse of WTC 7 "a mystery," Glanz reported that "experts said no building like it, a modern, steel-reinforced high-rise, had ever collapsed because of an uncontrolled fire." Glanz also quoted a structural engineer as saying: "[W]ithin the structural engineering community, [WTC 7] is considered to be much more important to understand [than the Twin Towers]," because engineers had no answer to the question, "why did 7 come down?"²¹

The mystery was not lessened in 2002 when FEMA issued the first official report on this building's collapse. Saying that its "best hypothesis" was that flaming debris from the collapse of the North Tower had ignited diesel fuel stored in the building, resulting in large, steel-weakening fires that made the building collapse, FEMA admitted that this hypothesis had "only a low probability of occurrence"²² (although Alexander Cockburn years later, as we saw above, would declare this report to be "more than adequate").

This cautionary statement by FEMA did not, however, prevent defenders of the official account from claiming that WTC 7's collapse was not really very mysterious after all. In

a 2006 book, Popular Mechanics told its readers what they could probably expect to find in the report on this building to be put out by NIST – which had taken over from FEMA the responsibility for issuing the official reports on the Twin Towers and WTC 7. Citing NIST’s “current working hypothesis,” Popular Mechanics said that WTC 7’s diesel fuel had probably fed the fires “for up to seven hours.”²³

Also, using NIST’s then-current thinking in order to claim that “WTC 7 was far more compromised by falling debris than the FEMA report indicated,” Popular Mechanics argued that critics could not reject the official account on the grounds that it would make WTC 7 the first steel-frame high-rise to have failed “because of fire alone,” because, Popular Mechanics claimed, the causes of WTC 7’s collapse were analogous to the causes of the collapses of WTC 1 and WTC 2: “A combination of physical damage from falling debris [analogous to the damage caused in the Twin Towers by the airplane impacts] and prolonged exposure to the resulting [diesel-fuel-fed] fires [analogous to the jet-fuel-fed fires in the Twin Towers].”²⁴

Popular Mechanics called this twofold explanation a “conclusion” that had been reached by “hundreds of experts from academia and private industry, as well as the government.” This claim evidently impressed many people, including Chris Hayes and Matthew Rothschild, both of whom said that Popular Mechanics had disproved the claims of the 9/11 Truth Movement. Rothschild, repeating Popular Mechanics’ twofold explanation, wrote:

“Building 7 . . . is a favorite of the conspiracy theorists, since the planes did not strike this structure. But the building did sustain damage from the debris of the Twin Towers. ‘On about a third of the face to the center and to the bottom – approximately ten stories – about 25 percent of the depth of the building was scooped out,’ Shyam Sunder, the lead investigator for the National Institute of Standards and Technology, told Popular Mechanics. What’s more, the fire in the building lasted for about eight hours, in part because there were fuel tanks in the basement and on some of the floors.”²⁵

Hayes, saying that “Popular Mechanics assembled a team of engineers, physicists, flight experts and the like to critically examine some of the Truth Movement’s most common claims,” reported that these experts “found them almost entirely without merit.” This counter-claim by Popular Mechanics evidently settled the matter for Hayes.²⁶

Also, although Terry Allen did not mention Popular Mechanics, her article was apparently dependent on it. Assuring her readers that she had found it “relatively easy” to undermine the “facts” employed by the 9/11 Truth Movement, she wrote:

“Many conspiracists offer the collapse of WTC Building 7 as the strongest evidence for the kind of controlled demolition that would prove a plot. Although not hit by planes, it was damaged by debris, and suffered fires eventually fueled by up to 42,000 gallons of diesel fuel stored near ground level.”²⁷

Like Rothschild, therefore, she gave the same twofold explanation for WTC 7’s collapse that had been provided by Popular Mechanics.²⁸

However, when NIST finally issued its WTC 7 report in 2008, it did not affirm either element in the twofold explanation that had been proffered by Popular Mechanics. With regard to the first element, NIST said: “[F]uel oil fires did not play a role in the collapse of WTC 7.”²⁹ With regard to the second element, NIST said: “Other than initiating the fires in WTC 7,

the damage from the debris from WTC 1 [the North Tower] had little effect on initiating the collapse of WTC 7.”³⁰

This second point means that, contrary to what Popular Mechanics had claimed it would say, NIST actually asserted that WTC 7 was brought down by fire, at least primarily. In NIST’s words, the collapse of WTC 7 was “the first known instance of the total collapse of a [steel-frame] tall building primarily due to fires.”³¹

One ambiguity needs clearing up: Although in these just-quoted statements, NIST seemed to indicate that the debris damage had a “little effect” on initiating the collapse, so that this collapse was only primarily (rather than entirely) due to fire, NIST generally treated fire as the sole cause: Besides repeatedly speaking of a “fire-induced” collapse,³² Also, in a press release announcing its Draft for Public Comment in August 2008, NIST called the collapse of WTC 7 “the first known instance of fire causing the total collapse of a tall building.” This press release, moreover, quoted lead investigator Shyam Sunder as saying: “Our study found that the fires in WTC 7 . . . caused an extraordinary event.”³³ The brief version of NIST’s final report said: “Even without the structural damage, WTC 7 would have collapsed from fires having the same characteristics as those experienced on September 11, 2001.”³⁴ The long version said: “WTC 7 sustained damage to its exterior as a result of falling debris from the collapse of WTC 1, but this damage was found to have no effect on the collapse initiating event.”³⁵

It is not wrong, therefore, to say that NIST portrayed WTC 7 as the first (and thus far only) steel-frame high-rise building to have come down because of fire alone. NIST said, in other words, precisely what Popular Mechanics, knowing that claims about unprecedented physical events are deeply suspect, had assured people it would not say.

In doing so, moreover, NIST contradicted both parts of Popular Mechanics’ explanation for WTC 7’s collapse, which, according to Rothschild and Allen, had provided the basis for discounting the 9/11 Truth Movement’s claims about this collapse. To review: Rothschild said that the official account was credible, contrary to the Truth Movement’s claims, because “the building did sustain damage from the debris of the Twin Towers” and the “fire in the building lasted for about eight hours,” due to the “fuel tanks in the basement and on some of the floors.” Allen likewise said the official account was believable because, although WTC 7 was not hit by a plane, “it was damaged by debris, and suffered fires eventually fueled by up to 42,000 gallons of diesel fuel stored near ground level.”³⁶

But then, when NIST later denied that either the debris-damage or the diesel fuel played a role in the collapse of WTC 7, Rothschild and Allen did not retract their prior assurances. It seems that they, in effect, simply said – like Gilda Radner on Saturday Night Live in the 1970s – “Never mind.” Their attitude seemed to be, in other words, that whatever the government says, that is what they will believe. Whatever kind of journalism this is, it is certainly not truth-seeking journalism.

In any case, NIST’s claim that WTC 7 suffered an unprecedented, fire-induced collapse is made even more problematic by the fact that the fires in this building were relatively unimpressive, compared with fires in some other steel-frame high-rises. In 1991, a huge fire in Philadelphia’s One Meridian Plaza lasted for 18 hours and gutted eight of the building’s 38 floors. In Caracas in 2004, a fire in a 50-story building raged for 17 hours, completely gutting the

building's top 20 floors. In neither case, however, did the building, or even a single floor, collapse.³⁷

In WTC 7, by contrast, there were long-lasting fires on only six of the building's 47 floors, according to NIST, and by "long-lasting," NIST meant only that they lasted up to seven hours.³⁸ It would be exceedingly strange, therefore, if fire had produced a total collapse of this building. The claim becomes even stranger when one discovers that NIST had no evidence that the fires on any of the floors lasted for much over three hours.³⁹

Accordingly, besides undermining the confident explanations of WTC 7's collapse offered by Popular Mechanics, NIST's conclusion about this building - that it was the first steel-frame high-rise building ever to be brought down by fire - appears to constitute a rather remarkable miracle-claim.

2. WTC 7's Collapse: A Perfect Imitation of an Implosion

More clearly miraculous, given the official account, was the precise way in which WTC 7 collapsed: symmetrically (straight down, with an almost perfectly horizontal roofline), into its own footprint. In order for this symmetrical collapse to occur, all the (vertical) steel columns supporting the building had to fail simultaneously. There were 82 of these columns, so the fire theory of WTC 7's collapse entails that the fires in this building caused all 82 of these columns to fail at the same instant.

Even if otherwise possible, such a symmetrical failure would have been essentially impossible even if the building had been entirely engulfed by fire, so that all the floors would have been evenly covered with fire. As it was, however, there were fires on only a few floors, and these fires never covered an entire floor at the same time. The official account implies, therefore, that a very asymmetrical pattern of fires produced an entirely symmetrical collapse. If that is not a genuine miracle, it will do until one comes along.

Another problem is the fact that, even if a symmetrical, total collapse could be caused by an asymmetrical pattern of fires, a fire theory could not explain the sudden onset of WTC 7's collapse. Popular Mechanics, which is unreliable on every aspect of 9/11 (as I showed in my 2007 book, *Debunking 9/11 Debunking*⁴⁰), apparently misled Chris Hayes on this point by suggesting otherwise. Attempting to illustrate his claim that Popular Mechanics had shown the core ideas of the 9/11 Truth Movement to be "almost entirely without merit," Hayes wrote:

"To pick just one example, steel might not melt at 1,500 degrees [Fahrenheit], the temperature at which jet fuel burns, but it does begin to lose a lot of its strength, enough to cause the support beams to fail."⁴¹

However, even if the fire could have heated the steel up to this temperature in the time available (which would have been impossible⁴²), the fire would have weakened the steel gradually, causing it to start sagging. Videos would, therefore, show deformations in the building before it came down. But they do not. One moment the building was perfectly immobile, and the next moment, as videos show,⁴³ it was accelerating downward in free fall (the significance of free fall will be discussed below). As Australian chemist Frank Legge has observed: "There is no sign of the slow start that would be expected if collapse was caused by the gradual softening of the steel."⁴⁴

Because of these two features of the collapse, anyone knowing anything about such things can tell, simply by seeing a video of WTC 7's collapse, that it was brought down

in the procedure known as "controlled demolition." For example, Daniel Hofnung, an engineer in Paris, has written: "In the years after [the] 9/11 events, I thought that all I read in professional reviews and French newspapers was true. The first time I understood that it was impossible was when I saw a film about the collapse of WTC 7."⁴⁵

Kansas City civil engineer Chester Gearhart wrote:

"I have watched the construction of many large buildings and also have personally witnessed 5 controlled demolitions in Kansas City. When I saw the towers fall on 9/11, I knew something was wrong and my first instinct was that it was impossible. When I saw building 7 fall, I knew it was a controlled demolition."⁴⁶

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), wrote simply of WTC 7's collapse: "Obviously it was the result of controlled demolition."⁴⁷

In revealing the collapse of WTC 7 to be an example of controlled demolition, moreover, the videos show it to be the type of controlled demolition known as "implosion," in which explosives and/or incendiaries are used to slice the building's steel support columns so as to cause the building to collapse into its own footprint.

In 2006, for example, a Dutch filmmaker asked Danny Jowenko, the owner of a controlled demolition company in the Netherlands, to comment on a video of the collapse of WTC 7, without telling him what it was. (Jowenko had been unaware that a third building had collapsed in New York on 9/11.) After viewing the video, Jowenko said: "They simply blew up columns, and the rest caved in afterwards. . . . This is controlled demolition." When asked if he was certain, he replied: "Absolutely, it's been imploded. This was a hired job. A team of experts did this."⁴⁸

Moreover, the reason to implode a building, rather than simply causing it to fall over sideways, is to avoid damaging nearby buildings, and engineering an implosion is no mean feat. An implosion, in the words of a controlled demolition website, is "by far the trickiest type of explosive project," which "only a handful of blasting companies in the world . . . possess enough experience . . . to perform."⁴⁹ Mark Loizeaux, the president of the afore-mentioned demolition firm, Controlled Demolition, Inc., has explained why: "[T]o bring [a building] down . . . so . . . no other structure is harmed," the demolition must be "completely planned," using "the right explosive [and] the right pattern of laying the charges."⁵⁰

Would it not be a miracle if a fire-induced collapse, based on scattered fires on a few of WTC 7's floors, had produced a collapse that perfectly imitated the kind of planned, controlled demolition that can be carried out by only a few companies in the world?

Chris Hayes suggested that the 9/11 Truth Movement, by doubting the government's account of 9/11, exemplifies a resurgence of the "paranoid style" in American politics. But in accepting the government's account, as defended by the pseudo-scientific Popular Mechanics, he illustrated the other target of his article, the "credulous style," which, he pointed out, is generally exemplified by the American media.⁵¹ Surely, however, his credulity does not extend to the acceptance of miracles.

3. WTC 7's Descent in Absolute Free Fall

Even if some readers question whether the two previously discussed features of the collapse of WTC 7, when understood within the framework of NIST's fire theory, imply

miracles, there can be no doubt about a third feature: the now-accepted (albeit generally unpublicized) fact that WTC 7 came down in absolute free fall for over two seconds.

Although members of the 9/11 Truth Movement had long been pointing out that this building descended at the same rate as a free-falling object, or at least virtually so, NIST had long denied this. As late as August 2008, when NIST issued its report on WTC 7 in the form of a Draft for Public Comment, it claimed that the time it took for the upper floors – the only floors that are visible on the videos – to come down “was approximately 40 percent longer than the computed free fall time and was consistent with physical principles.”⁵²

As this statement implied, any assertion that the building did come down in free fall, assuming a non-engineered collapse, would not be consistent with physical principles – meaning basic laws of Newtonian physics. Explaining why not during a “WTC 7 Technical Briefing” on August 26, 2008, NIST’s Shyam Sunder said:

“[A] free fall time would be [the fall time of] an object that has no structural components below it. . . . [T]he . . . time that it took . . . for those 17 floors to disappear [was roughly 40 percent longer than free fall]. And that is not at all unusual, because there was structural resistance that was provided in this particular case. And you had a sequence of structural failures that had to take place. Everything was not instantaneous.”⁵³

In saying this, Sunder was presupposing NIST’s theory that the building was brought down by fire, which, if it could have produced a collapse of any type, could have produced only a progressive collapse.

In response, high-school physics teacher David Chandler, who was allowed to submit a question at this briefing, challenged Sunder’s denial of free fall, stating that Sunder’s “40 percent longer” claim contradicted “a publicly visible, easily measurable quantity.”⁵⁴ Chandler then placed a video on the Internet showing that, by measuring this publicly visible quantity, anyone understanding elementary physics could see that “for about two and a half seconds. . . , the acceleration of the building is indistinguishable from freefall.”⁵⁵ (This is, of course, free fall through the air, not through a vacuum.)

In its final report on WTC 7, which came out in November 2008, NIST – rather amazingly – admitted free fall. Dividing the building’s descent into three stages, NIST described the second phase as “a freefall descent over approximately eight stories at gravitational acceleration for approximately 2.25 s[econds].”⁵⁶ NIST thereby accepted Chandler’s case – except for maintaining that the building was in absolute free fall for only 2.25, not 2.5, seconds (a trivial difference). NIST thereby affirmed a miracle, meaning a violation of one or more laws of physics.

Why this would be a miracle was explained by Chandler, who said: “Free fall can only be achieved if there is zero resistance to the motion.”⁵⁷ In other words, the upper portion of Building 7 could have come down in free fall only if something had suddenly removed all the steel and concrete in the lower part of the building, which would have otherwise provided resistance (to make a considerable understatement). If everything had not been removed and the upper floors had come down in free fall anyway, even if for only a fraction of a second, this would have been a miracle – meaning a violation of physical principles. Explaining one of the physical principles involved, Chandler said:

“Anything at an elevated height has gravitational potential energy. If it falls, and none of the energy is used for other things along the way, all of that energy is converted into kinetic energy – the energy of motion, and we call it ‘free fall.’ If any of the energy is used for other purposes, there will be less kinetic energy, so the fall will be slower. In the case of a falling building, the only way it can go into free fall is if an external force removes the supporting structure. None of the gravitational potential energy of the building is available for this purpose, or it would slow the fall of the building.”⁵⁸

That was what Sunder himself had explained, on NIST’s behalf, the previous August, saying that a free-falling object would be one “that has no structural components below it” to offer resistance. But NIST then in November, while still under Sunder’s leadership and still defending its fire theory of WTC 7’s collapse, agreed that, as an empirical fact, free fall happened. For a period of 2.25 seconds, NIST admitted, the descent of WTC 7 was characterized by “gravitational acceleration (free fall).”⁵⁹

Besides pointing out that the free fall descent of WTC 7 implied that the building had been professionally demolished, Chandler observed that this conclusion is reinforced by two features of the collapse mentioned above:

“[P]articularly striking is the suddenness of onset of free fall. Acceleration doesn’t build up gradually. . . . The building went from full support to zero support, instantly. . . . One moment, the building is holding; the next moment it lets go and is in complete free fall. . . . The onset of free fall was not only sudden; it extended across the whole width of the building. . . . The fact that the roof stayed level shows the building was in free fall across the entire width. The collapse we see cannot be due to a column failure, or a few column failures, or a sequence of column failures. All 24 interior columns and 58 perimeter columns had to have been removed . . . simultaneously, within a small fraction of a second.”⁶⁰

For its part, NIST, knowing that it had affirmed a miracle by agreeing that WTC 7 had entered into free fall, no longer claimed that its analysis was consistent with the laws of physics. Back in its August draft, in which it was still claiming that the collapse occurred 40 percent slower than free fall, NIST had said – in a claim made three times – that its analysis was “consistent with physical principles.”⁶¹ In the final report, however, every instance of this phrase was removed. NIST thereby almost explicitly admitted that its report on WTC 7, by affirming absolute free fall while continuing to deny that either incendiaries or explosives had been employed, is not consistent with basic principles of physics.

Accordingly, now that it is established that WTC 7 came down in absolute free fall for over two seconds, one cannot accept the official theory, according to which this building was not professionally demolished, without implying that at least one miracle happened on 9/11.

George Monbiot, as we saw, described members of this movement as “morons” who “believe that [the Bush regime] is capable of magic.” Unless Monbiot, upon becoming aware of NIST’s admission of free fall, changes his stance, he will imply that al-Qaeda is capable of magic.

Matthew Rothschild said he was “amazed” at how many people hold the “profoundly irrational and unscientific” belief that “Building 7 . . . came down by planted explosives.” Given the fact that progressive members of the 9/11 Truth Movement “so revere science on such issues as tobacco,

stem cells, evolution, and global warming," Rothschild continued, it is "more than passing strange that [they] are so willing to abandon science and give in to fantasy on the subject of 9/11."

NIST's report on WTC 7, however, provided the final proof that the 9/11 Truth Movement had been right all along – that those progressives who credulously accept the Bush-Cheney administration's explanation for WTC 7's collapse are the ones who "abandon science and give in to fantasy on the subject of 9/11."

4. The Twin Towers: Descending in Virtual Free Fall

Miracles are implied not only by the official account of WTC 7's collapse but also by the official account of the destruction of the Twin Towers. According to this account, the North Tower (WTC 1) and the South Tower (WTC 2) came down because of three and only three causes: (i) the airplane impacts, which caused structural damage; (ii) the ensuing fires, which were initially fed and spread by jet fuel from the planes; and (iii) gravity. NIST's negative claim here is that neither explosives nor incendiaries helped bring the buildings down.

One of the miracles implicit in this account is that, although each building had 287 steel support columns - 240 perimeter columns and 47 massive core columns – and although neither explosives nor incendiaries were used to destroy these columns, each building came down, as NIST itself put it, "essentially in free fall."⁶² How would that have been possible?

According to NIST, each airliner took out several perimeter and core columns at its area of impact and also created huge fires, which began weakening the steel. After a period of time (56 minutes for the South Tower, 102 minutes for the North Tower), "the massive top section of [each] building at and above the fire and impact floors" fell down on the lower section, which "could not resist the tremendous energy released by [the top section's] downward movement."⁶³ Accordingly, NIST's report said:

"Since the stories below the level of collapse initiation provided little resistance to the tremendous energy released by the falling building mass, the building section above came down essentially in free fall, as seen in videos."⁶⁴

Trying to describe more fully its theory of how this happened, NIST wrote:

"The potential energy released by the downward movement of the large building mass far exceeded the capacity of the intact structure below to absorb that energy through energy of deformation. . . . As the stories below sequentially failed, the falling mass increased, further increasing the demand on the floors below, which were unable to arrest the moving mass. In other words, the momentum [of the top stories] falling on the supporting structure below . . . so greatly exceeded the strength capacity of the structure below that [the latter] was unable to stop or even to slow the falling mass."⁶⁵

Even before we think about any specific law of physics violated by this account (assuming that no explosives or incendiaries were used to remove the steel columns), we can see intuitively that this explanation implies a miracle: As NIST critic Jim Hoffman has pointed out, it "requires us to believe that the massive steel frames of the [lower structure of the] towers provided no more resistance to falling rubble than [would] air."⁶⁶

As to why physics rules out NIST's account, William Rice, who has both practiced and taught structural engineering, pointed out that NIST's account "violates Newton's Law of

Conservation of Momentum," which requires that, "as the stationary inertia of each floor is overcome by being hit," the speed of descent must decrease.⁶⁷ A paper by physicists and engineers published in an engineering journal agreed, stating:

"NIST evidently neglects a fundamental law of physics in glibly treating the remarkable 'free fall' collapse of each Tower, namely, the Law of Conservation of Momentum. This law of physics means that the hundreds of thousands of tons of material in the way must slow the upper part of the building because of its mass."⁶⁸

A letter to NIST signed by physicist Steven Jones, chemist Kevin Ryan, and architect Richard Gage, among others, made a similar point, saying:

"Basic principles of engineering (for example, the conservation of momentum principle) would dictate that the undamaged steel structure below the collapse initiation zone would, at the very least, resist and slow the downward movement of the stories above. There is, indeed, a good chance that the structural strength of the steelwork below would arrest the downward movement of the stories above."⁶⁹

NIST, as we saw above, claimed that the lower portion would not retard – let alone arrest – the downward movement of the upper part, because the "tremendous energy" of the upper part's downward momentum would be irresistible. Let us examine this claim with regard to the North Tower. It was struck at the 95th floor, so the upper portion consisted of only 16 floors. Also, the structure at this height had relatively little weight to bear, compared with the structure lower down, so the steel columns in the upper part, above the area of impact, were much thinner than those in the lower part. This means that the upper 16 floors probably constituted less than 15 percent of the building's total weight. Also, the top portion would have fallen only a story or two before hitting the lower portion, so it would not have acquired much velocity before striking the lower portion. For these reasons, the top portion would have not had much momentum, so its energy would not have been so "tremendous," it would seem, as to be irresistible by the lower part, with its millions of pounds of interconnected steel.

This conclusion, based on a purely commonsense analysis, was confirmed by a technical analysis of the North Tower collapse by mechanical engineer Gordon Ross. Far from failing to retard the downward movement of the building's upper portion, his analysis showed, the lower portion would have quickly and completely stopped the top portion's descent. Having made the necessary calculations (which NIST failed to do), Ross concluded that the "vertical movement of the falling section would [have been] arrested . . . within 0.02 seconds after impact. A collapse driven only by gravity would not continue to progress beyond that point."⁷⁰

If Ross's calculations are even close to accurate, then NIST's account – according to which the Twin Towers came down "essentially in free fall," even though they were not professionally demolished – implied two enormous miracles (one for each building).

Another element in NIST's account, to be sure, is the claim that the fires in the buildings weakened the steel, so that it provided less resistance than normal. "[W]hen bare steel reaches temperatures of 1,000 degrees Celsius," NIST wrote, "it softens and its strength reduces to roughly 10 percent of its room temperature value."⁷¹ NIST thereby, without

actually saying it, implied that the steel columns had been heated up to the point where they lost 90 percent of their strength.

NIST was in this way able to mislead some nonscientific journalists into thinking that fire could have caused the Twin Towers to collapse. Alexander Cockburn, stating that the collapses did not require preplaced explosives, said: "High grade steel can bend disastrously under extreme heat."⁷² Chris Hayes, stating that the 9/11 Truth Movement's claims about the Twin Towers are without merit, wrote (in a passage quoted earlier): "[S]teel might not melt at 1,500 degrees (Fahrenheit), the temperature at which jet fuel burns, but it does begin to lose a lot of its strength, enough to cause the support beams to fail."⁷³

However, the idea that steel heated up by fire could account for the collapses of the Twin Towers is wrong for at least two reasons. In the first place, even if the steel had indeed lost 90 percent of its strength, it would still have offered some resistance, because the law of conservation of momentum would not have taken a holiday. So a collapse "essentially in free fall" would have been impossible.

In the second place, there is no empirical basis for claiming that either tower's steel had lost any strength, let alone 90 percent of it. On the one hand, as MIT engineering professor Thomas Eagar has pointed out, structural steel only "begins to soften around 425°C [797°F]."⁷⁴ On the other hand, scientific studies on 16 perimeter columns carried out by NIST scientists found that "only three [of these perimeter] columns had evidence that the steel reached temperatures above 250°C [482°F]." These NIST scientists also found no evidence that even this temperature (250°C [482°F]) had been reached by any of the core columns.⁷⁵

Accordingly, far from having evidence that any of the steel in the columns reached the temperature (1,000°C [1,832°F]) at which it would have lost 90 percent of its strength, NIST had no evidence that any of the columns would have lost even one percent of their strength. If neither explosives nor incendiaries were used to remove the 287 steel support columns, therefore, the top portion of the building came down through the lower portion as if it were not there, even though the steel in that portion was at full strength.

In claiming, therefore, that both of the Twin Towers came down essentially in free fall without the aid of either incendiaries or explosives, NIST implied enormous violations of the physical principle known as the conservation of momentum. Although Rothschild accused the 9/11 Truth Movement of being "irrational and unscientific," this characterization applies instead to NIST's report on the Twin Towers and anyone who accepts it.

5. The South Tower's Mid-Air Miracles

Having illustrated the previous miracle primarily in terms of the North Tower, I turn now to a miracle unique to the South Tower. It was struck at the 80th floor, so that its upper portion consisted of a 30-floor block. As videos of the beginning of this building's collapse show, this block began tipping toward the corner that had been most damaged by the airplane's impact. According to the law of the conservation of angular momentum, this section should have fallen to the ground far outside the building's footprint. "However," Jim Hoffman and fellow 9/11 researcher Don Hoffman have observed,

"as the top then began to fall, the rotation decelerated. Then it reversed direction [even though the] law of conservation of angular momentum states that a solid object in rotation

will continue to rotate at the same speed unless acted on by a torque."⁷⁶

And then, as if this were not miraculous enough:

"We observe [wrote physicist Steven Jones] that approximately 30 upper floors begin to rotate as a block, to the south and east. They begin to topple over, not fall straight down. The torque due to gravity on this block is enormous, as is its angular momentum. But then – and this I'm still puzzling over – this block turned mostly to powder in mid-air! How can we understand this strange behavior, without explosives?"⁷⁷

If someone were to ask how even explosives could explain this behavior, we could turn to a statement by Mark Loizeaux, the president of Controlled Demolition, Inc. In response to an interviewer's question as to how he made "doomed structures dance or walk," Loizeaux said:

"[B]y differentially controlling the velocity of failure in different parts of the structure, you can make it walk, you can make it spin, you can make it dance. We've taken it and moved it, then dropped it or moved it, twisted it and moved it down further – and then stopped it and moved it again. We've dropped structures 15 storeys, stopped them and then laid them sideways. We'll have structures start facing north and end up going to the north-west."⁷⁸

If we suppose that explosives were used, therefore, we can understand the mid-air dance performed by the upper portion of the South Tower.

If we refuse to posit explosives, however, we are stuck with a major miracle: Although the upper block was rotating and tipping in such a way that its angular momentum should have caused it to fall down to the side, it somehow righted itself by disintegrating.

This disintegration, incidentally, further undermines the official theory, according to which the "tremendous energy" of this block's downward momentum caused the lower part of the South Tower to collapse. This theory requires that the upper part smashed down, as a solid block, on the lower part. Videos show, however, that it did not. As Gage, Jones, Ryan, and other colleagues pointed out to NIST:

"[T]he upper portion of WTC 2 did not fall as a block upon the lower undamaged portion, but instead disintegrated as it fell. Thus, there would be no single large impact from a falling block . . . [but only] a series of small impacts as the fragments of the disintegrating upper portion arrived."⁷⁹

6. Horizontal Ejections from the Twin Towers

Dwain Deets, former director of the research engineering division at NASA's Dryden Flight Research Center, has written that the "massive structural members being hurled horizontally" from the Twin Towers "leave no doubt" in his mind that "explosives were involved."⁸⁰

Deets was referring to the fact that the collapse of each of the Twin Towers began with a massive explosion near the top, during which huge sections of perimeter columns were ejected out horizontally so powerfully that some of them traveled 500 to 600 feet. Although this feature of the collapses was not mentioned in NIST's (2005) report on the Twin Towers, there could be no doubt about it, because some of these sections of steel implanted themselves in neighboring buildings, as can be seen in videos and photographs.⁸¹

These ejections are now, in any case, part of the official account, because NIST, apparently finding them necessary to explain how fires got started in WTC 7, mentioned them in its report on this building. In Shyam Sunder's opening

statement at the August 2008 press briefing to announce the release of NIST's final report on WTC 7, he said: "The debris from Tower 1 . . . started fires on at least 10 floors of the building."⁸² NIST's WTC 7 report said: "The fires in WTC 7 were ignited as a result of the impact of debris from the collapse of WTC 1, which was approximately 110 m[eters] (350 ft) to the south."⁸³

NIST thereby admitted that debris had been thrown out horizontally from the North Tower at least 350 feet.⁸⁴ NIST's report also stated:

"When WTC 1 collapsed at 10:28:22 AM, . . . some fragments [of debris] were forcibly ejected and traveled distances up to hundreds of meters. Pieces of WTC 1 hit WTC 7, severing six columns on Floors 7 through 17 on the south face and one column on the west face near the southwest corner. The debris also caused structural damage between Floor 44 and the roof."⁸⁵

Debris that caused such extensive damage, including the severing of seven steel columns, had to be quite heavy. NIST seemed to be granting, therefore, that sections of steel columns had been hurled at least 650 feet (because "hundreds of meters" would mean at least 200 meters, which would be about 650 feet). Enormous force would be needed to eject large sections of steel that far out.

What could have produced this force? According to NIST, as we saw earlier, there were only three causal factors in the collapse of the Twin Towers: the airplane impacts, the fires, and gravitational attraction. The airplane impacts had occurred 56 minutes (South Tower) and 102 minutes (North Tower) earlier, and gravitational attraction pulls things straight downward. Fire could, to be sure, produce horizontal ejections by causing jet fuel to explode, but the jet fuel had, NIST pointed out, burned up within "a few minutes."⁸⁶ Therefore, although NIST admitted that these horizontal ejections occurred, it suggested no energy source to explain them.

High explosives, such as RDX or nanothermite, could explain these horizontal ejections. According to NIST, however, explosives did not contribute to the destruction of the Twin Towers. Those who accept NIST's account must, therefore, regard these horizontal ejections as constituting yet another miracle.

7. Metal-Melting Fires

In light of the above-discussed unprecedented effects produced by the fires in the WTC buildings (according to the official account), it would seem that these fires must have had miraculous powers. This conclusion is reinforced by an examination of still more extraordinary effects.

Swiss-Cheese Steel: Within a few months of 9/11, three professors from Worcester Polytechnic Institute (WPI) had issued a brief report about a piece of steel recovered from the WTC 7 debris, stating that it had undergone "microstructural changes," including "intergranular melting."⁸⁷ A greatly expanded version of this report, which contained a description of a similarly eroded piece of steel from one of the Twin Towers, was included as an appendix to the first official report on the destruction of the World Trade Center, which was issued by FEMA in 2002.⁸⁸

A New York Times story, noting that parts of these pieces of steel had "melted away," even though "no fire in any of the buildings was believed to be hot enough to melt steel outright," said that these discoveries constituted "[p]erhaps the deepest mystery uncovered in the investigation."⁸⁹ Describing these mysterious pieces of steel more fully, an

article in WPI's magazine, entitled "The 'Deep Mystery' of Melted Steel," said:

"[S]teel – which has a melting point of 2,800 degrees Fahrenheit – may weaken and bend, but does not melt during an ordinary office fire. Yet . . . [a] one-inch column has been reduced to half-inch thickness. Its edges – which are curled like a paper scroll – have been thinned to almost razor sharpness. Gaping holes – some larger than a silver dollar – let light shine through a formerly solid steel flange. This Swiss cheese appearance shocked all of the fire-wise professors, who expected to see distortion and bending – but not holes."⁹⁰

One of the three WPI professors, Jonathan Barnett, was quoted by the Times as saying that the steel "appear[ed] to have been partly evaporated in extraordinarily high temperatures."⁹¹

That the steel had actually evaporated – not merely melted – was also reported in another New York Times story. Professor Abolhassan Astaneh-Asl of the University of California at Berkeley, speaking of a horizontal I-beam from WTC 7, reportedly said: "Parts of the flat top of the I, once five-eighths of an inch thick, had vaporized."⁹²

Why do these phenomena involve miracles? Because the fires could not possibly, even under the most ideal conditions (which did not obtain), have been hotter than 1,800 degrees Fahrenheit (the maximum possible temperature for hydrocarbon-based building fires, which these fires were said to be), whereas the melting and boiling points of steel are only slightly lower than those of iron, which are 2,800°F and 5,182°F, respectively.⁹³ So if one accepts the official account, according to which all the heat was produced by the building fires, then one must believe that these fires had miraculous powers.

The National Institute of Standards and Technology (NIST), which took over from FEMA the task of writing the official reports on the WTC, avoided this issue by simply not mentioning any of these pieces of steel, even though two of them had been discussed in a FEMA report appendix. NIST even claimed that no recovered steel from WTC 7 could be identified, because the steel used in this building, unlike that used in the Twin Towers, "did not contain . . . identifying characteristics."⁹⁴

In making this claim, however, NIST was clearly not being truthful. For one thing, it had previously published a document in which it had referred to steel recovered from WTC 7 – including the piece discussed by the WPI professors.⁹⁵ Also, NIST's claim about not identifying any WTC 7 steel was made in August 2008, shortly after the airing in July 2008 of a BBC program on WTC 7, in which one of those WPI professors, Jonathan Barnett, had discussed an "eroded and deformed" piece of steel from WTC 7, which he and his colleagues had studied in 2001. These professors knew "its pedigree," Barnett explained, because "this particular kind of steel" had been used only in WTC 7, not in the Twin Towers.⁹⁶

So, although it called the collapse of WTC 7 "the first known instance of fire causing the total collapse of a tall building,"⁹⁷ NIST had demonstrated its awareness of a recovered piece of steel from this building that only a very miraculous fire could have produced. NIST was surely also aware of the similarly eroded piece of steel from one of the Twin Towers, which had likewise been reported by the WPI professors in their paper included as an appendix to the 2002 FEMA report.

If the fires in WTC 7 and the Twin Towers had miraculous powers, we would expect still more miraculous effects to have been discovered, and this was indeed the case.

Melted Iron: The RJ Lee Group, a scientific research organization, was hired by Deutsche Bank, which had a building close to the World Trade Center, to prove that the dust contaminating its building after 9/11 was not ordinary building dust, as its insurance company claimed, but had resulted from the destruction of the World Trade Center. The RJ Lee Group's reports showed that the dust in the bank's building shared the unique chemical signature of the WTC dust, part of which was "[s]pherical iron . . . particles."⁹⁸ There were, moreover, an enormous number of these particles: Whereas iron particles constitute only 0.04 percent of normal building dust, they constituted (a whopping) 5.87 percent of the WTC dust.⁹⁹ The existence of these particles, the RJ Lee Group said, proved that iron had "melted during the WTC Event."¹⁰⁰ The scientists conducting the EPA's WTC dust signature study, incidentally, had at one time considered including "iron spheres" among the components to be mentioned; it would be interesting to learn why this idea was dropped.¹⁰¹

In any case, the identification of iron spheres by both the EPA and the RJ Lee Group was another miraculous discovery, for the reason given above: The melting point of iron is 2,800°F, whereas the WTC fires could not possibly have gotten above 1,800°F.¹⁰²

Melted Molybdenum: Scientists at the US Geological Survey, in a study intended to aid the "identification of WTC dust components," discovered an even more miraculous effect of the fires. Besides finding the spherical iron-rich particles, these scientists found that molybdenum, the melting point of which is 4,753°F (2,623°C), had also melted. Although these USGS scientists failed to mention this discovery in their published report,¹⁰³ another group of scientists, having obtained the USGS team's data through a FOIA (Freedom of Information Act) request, reported evidence showing that the USGS scientists had devoted serious study to "a molybdenum-rich spherule."¹⁰³

8. Inextinguishable Fires

Besides having the power to produce the miraculous effects already reported, the World Trade Center fires were also miraculously inextinguishable. The fact that fires continued burning in the Ground Zero rubble for many months, in spite of every attempt to put them out, was widely reported. The title of a New York Times story in the middle of November, two months after the attacks, referred to the "Most Stubborn Fire." A New Scientist article in December was entitled "Ground Zero's Fires Still Burning." Very hot fires continued to burn in the Ground Zero debris piles, these stories reported, even though heavy rains came down, millions of additional gallons of water were sprayed onto the piles, and a chemical suppressant was pumped into them.¹⁰⁵

According to Greg Fuchek, vice president of a company that supplied computer equipment to identify human remains at the site, the working conditions at Ground Zero remained "hellish" for six months, because the ground temperature ranged from 600 to 1,500 degrees Fahrenheit.¹⁰⁶

These inextinguishable fires were a mystery. Assuming the truth of the official account of the destruction of the World Trade Center, there would have been nothing in the debris pile other than ordinary building materials, and these can burn only in the presence of oxygen. There would have been little oxygen available in the densely packed debris piles, and wherever it was available, the fires should have been easily

suppressed by the enormous amounts of water and chemical suppressants pumped into the piles. The fires' seemingly miraculous power to keep burning could not be explained by the airplanes' jet fuel (which some people seem to think of as having miraculous powers, even though it is essentially kerosene), because it would have all burned out, as mentioned above, within a few minutes.

A non-miraculous explanation is suggested by the discovery of a large amount of nanothermite residue in the WTC dust, which was reported in a peer-reviewed scientific journal in 2009.¹⁰⁷ Being both an incendiary and a high explosive, nanothermite is one among several types of "energetic nanocomposites" – described by an article in *The Environmentalist* as "chemical energetic materials, which provide their own fuel and oxidant and are not deterred by water, dust or chemical suppressants."¹⁰⁸ The discovery of nanothermite residue in the dust provided, therefore, an empirical basis for a non-miraculous explanation of the long-lasting fires at Ground Zero.

According to the official account, however, the buildings were all brought down without the aid of any incendiaries or explosives. WTC 7 was said by NIST, as we saw above, to have been brought down by fire alone, and this fire, NIST added, was "an ordinary building contents fire."¹⁰⁹ As for the Twin Towers, they were brought down through the combined effects of the airplane impacts and the ensuing fires: NIST explicitly rejected "alternative hypotheses suggesting that the WTC towers were brought down by controlled demolition using explosives."¹¹⁰

For anyone who accepts the official account, therefore, the inextinguishable underground fires at Ground Zero provide still another demonstration of miraculous powers that must have been possessed by the World Trade Center fires.

9. Supernatural Sulfur

In the seventh section, I discussed the two Swiss-cheese-appearing pieces of steel that had been recovered from the World Trade Center rubble – one from WTC 7, the other from one of the Twin Towers. In that discussion, however, I ignored one of the central features of these pieces of steel, which was central to the reason they were said by the *New York Times* to constitute "the deepest mystery."

This was the fact that the thinning of the steel had resulted, according to the three WPI professors' report, from sulfidation, but there was no explanation for the source of the sulfur or the mechanism through which it entered into the steel. According to a preliminary analysis reported by the professors, said the NYT article, "sulfur released during the fires – no one knows from where – may have combined with atoms in the steel to form compounds that melt at lower temperatures."¹¹¹

This phenomenon was discussed more fully in the article, "The 'Deep Mystery' of Melted Steel," in WPI's magazine, which attributed the holes and the thinning to "a eutectic reaction" that "occurred at the surface, causing intergranular melting capable of turning a solid steel girder into Swiss cheese."¹¹²

In summarizing their findings in the paper included in the FEMA report, the three professors wrote:

"1. The thinning of the steel occurred by a high-temperature corrosion due to a combination of oxidation and sulfidation.

"2. Heating of the steel into a hot corrosive environment approaching 1,000°C (1,832°F) results in the formation of a eutectic mixture of iron, oxygen, and sulfur that liquefied the steel.

"3. The sulfidation attack of steel grain boundaries accelerated the corrosion and erosion of the steel."¹¹³

Then, having mentioned sulfidation in each of these three points, the professors added: "The severe corrosion and subsequent erosion of Samples 1 and 2 are a very unusual event. No clear explanation for the source of the sulfur has been identified. . . . A detailed study into the mechanisms of this phenomenon is needed."¹¹⁴

However, although Arden Bement, who was the director of NIST when it took over the WTC project from FEMA, said that NIST's report would address "all major recommendations contained in the [FEMA] report,"¹¹⁵ NIST ignored this recommendation. Indeed, as we saw earlier, it did not even mention these Swiss-cheese pieces of steel.

Also, when NIST was later asked about the sulfidation, it tried to maintain that the source of the sulfur was not actually a mystery, saying that "sulfur is present in the gypsum wallboard that was prevalent in the interior partitions."¹¹⁶

But there are three problems with this explanation. First, gypsum is calcium sulfate, so if all the sulfur discovered had been from gypsum wallboard, it would have been matched by about the same percentage of calcium. That, however, was not the case.¹¹⁷

Second, the WPI professors reported not merely that there was sulfur in the debris, but that the steel had been sulfidized. This means that sulfur had entered into the intergranular structure of the steel (which the New York Times article had indicated by saying that sulfur had "combined with atoms in the steel"). As chemist Kevin Ryan has said, the question NIST would need to answer is: "[H]ow did sulfates, from wallboard, tunnel into the intergranular microstructure of the steel and then form sulfides within?"¹¹⁸ Physicist Steven Jones added:

"[I]f NIST claims that sulfur is present in the steel from gypsum, they should do an (easy) experiment to heat steel to about 1000°C in the presence of gypsum and then test whether sulfur has entered the steel. . . . [T]hey will find that sulfur does not enter steel under such circumstances."¹¹⁹

Chemistry professor Niels Harrit has explained why it would not: Although gypsum contains sulfur, this is not elemental sulfur, which can react with iron, but sulfur in the form of calcium sulfate, which cannot.¹²⁰

The official account of the destruction of the World Trade Center, therefore, implies that the sulfidized steel had been produced by a twofold miracle: Besides the fact that the fires, as we saw earlier, could have melted steel only if they had possessed miraculous powers, the sulfur in the wallboard could have entered into this melted steel only by virtue of supernatural powers.

Once again, a non-miraculous explanation is available: We need only suppose that thermate, a well-known incendiary, had been employed. As Steven Jones has written:

"The thermate reaction proceeds rapidly and is in general faster than basic thermite in cutting through steel due to the presence of sulfur. (Elemental sulfur forms a low-melting-temperature eutectic with iron.)"¹²¹

Besides providing an explanation for the eutectic reaction, thermate could also, Jones pointed out, explain the melting, oxidation, and sulfidation of the steel:

"When you put sulfur into thermite it makes the steel melt at a much lower temperature, so instead of melting at about 1,538°C [2,800°F] it melts at approximately 988°C

[1,820°F], and you get sulfidation and oxidation in the attacked steel."¹²²

NIST, however, insists that no incendiaries were employed: WTC 7 was brought down by fire alone; the Twin Towers by the fires combined with damage from the airplane impacts. Those who endorse the official account, therefore, are stuck with yet another miracle.

III Which 9/11 Conspiracy Theory Is Truly Discrediting and Distracting?

In light of the above facts, I ask Terry Allen, David Corn, Noam Chomsky, Alexander Cockburn, Chris Hayes, George Monbiot, Matthew Rothschild, and Matt Taibbi: Are you still comfortable with endorsing the official account of the destruction of the World Trade Center?

A symposium on "State Crimes Against Democracy" in one of our major social science journals, *American Behavioral Scientist*,¹²³ has recently addressed this issue. Liking Orwell's "secret doctrine" that $2 + 2 = 4$, which intellectuals must safeguard in dark times, to unquestioned laws of physics, one of the symposium's authors criticized "the awesome intellectual silence making permissible the blithe dismissal of more than one law of thermodynamics in the World Trade Center Towers' collapse."¹²⁴ Part of this silence has involved the failure of the academy to protest when "Professor Steven Jones found himself forced out of [a] tenured position for merely reminding the world that physical laws, about which there is no dissent whatsoever, contradict the official theory of the World Trade Center Towers' collapse."¹²⁵

I wonder if you are still comfortable with giving your own consent to NIST's "blithe dismissal" of otherwise unquestioned physical principles – as did Cockburn, when he ridiculed the 9/11 Truth Movement for its "delirious litanies about . . . the collapse of the WTC buildings," and Taibbi, when he wrote contemptuously of people who have tried to educate him "on the supposed anomalies of physics involved with the collapse of WTC-7."¹²⁶ I would think that, if there are good reasons to suspect that these physical principles have been dismissed in the interests of covering up a major state crime against democracy, you would be especially uncomfortable with giving your consent to it.

Some of you have expressed fear, to be sure, that the left will be discredited insofar as it is seen as endorsing a 9/11 conspiracy theory. Having asked in 2007, "Why do I bother with these morons?" George Monbiot replied: "Because they are destroying the movements some of us have spent a long time trying to build."¹²⁷ In 2009, David Corn wrote: "[W]hen the 9/11 conspiracy theories were first emerging on the left, I wrote several pieces decrying them [for] fear . . . that this unsound idea would infect the left and other quarters – discrediting anyone who got close to it."¹²⁸

Some of you, moreover, have objected to the 9/11 Truth Movement on the grounds that it has served as a distraction from truly important issues. The 9/11 conspiracy theories, Corn wrote in 2002, serve to "distract people from the real wrongdoing."¹²⁹ Cockburn, writing in 2006, agreed, saying: "The Conspiracy Nuts have combined to produce a huge distraction."¹³⁰ That same year, Chomsky said: "One of the major consequences of the 9/11 movement has been to draw enormous amounts of energy and effort away from activism directed to real and ongoing crimes of state."¹³¹ And Monbiot, naming in 2007 some truly important issues from which, in his view, the 9/11 conspiracy theory has distracted us, mentioned "climate change, the Iraq war,

nuclear proliferation, inequality, . . . [the fact] that corporate power stands too heavily on democracy, [and] that war criminals, cheats and liars are not being held to account.”¹³²

I will address these two fears – of being discredited and of being distracted – in order.

1. The Fear of Being Discredited

You are certainly right to fear that the left would be discredited by being aligned with a conspiracy theory that is scientifically unsupportable and even absurd. It is hard to imagine, however, what could discredit the left more than having many of its recognized leaders endorsing the Bush-Cheney administration’s 9/11 conspiracy theory, especially at a time when more and more scientists and people in relevant professions are pointing out its absurdities.

Conspiracy Theories and the Official Account of 9/11: I realize, of course, that most of you do not like to acknowledge that the official account of 9/11 is itself a conspiracy theory, given the one-sided, propagandistic meaning with which this term is now commonly employed. As New Zealand philosopher Charles Pigden has pointed out in a superb essay entitled “Conspiracy Theories and the Conventional Wisdom”:

“[T]o call someone ‘a conspiracy theorist’ is to suggest that he is irrational, paranoid or perverse. Often the suggestion seems to be that conspiracy theories are not just suspect, but utterly unbelievable, too silly to deserve the effort of a serious refutation.”¹³³

However, Pigden continues, using the term in this way is intellectually dishonest, because “a conspiracy theory is simply a theory that posits a conspiracy - a secret plan on the part of some group to influence events by partly secret means.”¹³⁴ And, given this neutral, dictionary meaning of the term:

“[E]very politically and historically literate person is a big-time conspiracy theorist, since every such person subscribes to a vast range of conspiracy theories. . . . [T]here are many facts that admit of no non-conspiratorial explanation and many conspiracy theories that are sufficiently well-established to qualify as knowledge. It is difficult . . . to mount a coup [or an assassination] without conspiring. . . . Thus anyone who knows anything about the Ides of March or the assassinations of Archduke Franz Ferdinand or the Tsar Alexander II is bound to subscribe to a conspiracy theory, and hence to be a conspiracy theorist.”¹³⁵

In light of the neutral meaning of the term provided by Pigden, everyone is a conspiracy theorist about 9/11, not only people who believe that the US government was complicit. According to the government’s theory, the 9/11 attacks resulted from a conspiracy between Osama bin Laden, other al-Qaeda leaders (such as Khalid Sheikh Mohammed), and 19 young members of al-Qaeda who agreed to hijack airliners.¹³⁶

Failure to recognize this point can lead to absurd consequences. For example, after an article about 9/11 by former Minnesota Governor Jesse Ventura, which had been posted at the Huffington Post, was quickly taken down, the HP editor gave this explanation: “The Huffington Post’s editorial policy . . . prohibits the promotion and promulgation of conspiracy theories — including those about 9/11. As such, we have removed this post.”¹³⁷ In response, I pointed out that this policy entails that the HP “cannot accept any posts that state, or imply, that al-Qaeda was responsible for the 9/11 attacks, for that is a conspiracy theory.” This fact has been acknowledged, I added, by former Harvard law

professor and current Obama administration member Cass Sunstein – who referred to the above-quoted article by Charles Pigden. One implication of this fact combined with HP’s policy, I concluded, is that HP “cannot allow President Obama to say that we are in Afghanistan to ‘get the people who attacked us on 9/11,’ because he’s thereby endorsing the Bush-Cheney conspiracy theory about 9/11.”¹³⁸ But HP, evidently not bothered by logical inconsistency, has not changed its policy.

In any case, once it is acknowledged that both of the major theories about 9/11 are conspiracy theories, the 9/11 Truth’s Movement’s theory cannot rationally be rejected on the grounds that it is a conspiracy theory. Making a rational judgment requires comparing the two conspiracy theories to see which one is more plausible. And when the issue is posed in this way, the official theory does not fare well, whether viewed from a scientific or a merely prima facie perspective.

The Prima Facie Absurdity of the Official Conspiracy Theory: Even when viewed only superficially (prima facie), the central elements in the official story, if evaluated in abstraction from the fact that it is the official story, is certainly implausible – it probably would have been even too implausible to pass muster as the plot for a bad Hollywood movie. Matt Taibbi has made such a statement about the story implicit in the various claims made by the 9/11 Truth Movement, saying that if you combine those claims into a coherent script, “you get the dumbest story since Roman Polanski’s *Pirates*.”¹³⁹ However, aside from the fact that Taibbi failed to support this claim, he simply ignored the absurdity of the official story, which, boiled down to a one-sentence summary, says:

Inexperienced Muslim hijackers, armed only with knives and box-cutters, took control of four airliners, then outfoxed the world’s most sophisticated air defense system, then used two of these airliners to bring three skyscrapers down (indeed, straight down, in virtual free fall),¹⁴⁰ and then, almost an hour later - when the US air defense system would have been on highest alert - flew a third one, undetected, from the mid-west back to Washington DC, where – thanks to heroic piloting by a man who had never before flown an airliner and who was, according to the New York Times, known as a “terrible pilot,” incapable of safely flying even a tiny plane – this third airliner went through an extremely difficult trajectory (even too difficult for them, said some experienced airline pilots) in order to strike the first floor of the Pentagon – surely the most well-protected building on the planet – without scraping the Pentagon lawn.

What could discredit “the left” more than the fact that you, some of its leading spokespersons, have endorsed such nonsense?

The Scientific Status of the Two Conspiracy Theories. Actually, there is one thing that would be even more discrediting: If, after having it pointed out to you that at least nine miracles are implied by this story, you fail to renounce your former acceptance of it.

Also, it is not only the miracles implicit in the official account that undermine your apparent assumption that good science supports the official account rather than that of the 9/11 Truth Movement. Although that assumption was less obviously unreasonable a few years ago, at least by people who either could not or would not look at the evidence for themselves, that assumption is now completely and obviously unreasonable, due to developments that have occurred in the past few years.

In 2006, as we saw above, Chomsky suggested that there would be two decisive tests for the physical evidence touted by the 9/11 Truth Movement: (i) "submit it to specialists [with] the requisite background in civil-mechanical engineering, materials science, [and] building construction." (ii) "submit it to a serious journal for peer review and publication."

To begin with the second test: A few months before December 2006, when Chomsky made this suggestion, physicist Steven Jones, at that time a professor at Brigham Young University, and some other scientists started a new online outlet, the Journal of 9/11 Studies. By now, it has published dozens of peer-reviewed papers, five of which were cited earlier: "Why Indeed Did the WTC Buildings Completely Collapse?" (by Jones himself); "9/11: Acceleration Study Proves Explosive Demolition" (by Frank Legge); "Revisiting 9/11/2001: Applying the Scientific Method" (by Jones); "Momentum Transfer Analysis of the Collapse of the Upper Storeys of WTC 1" (by Gordon Ross); and "Extremely High Temperatures during the World Trade Center Destruction" (by Jones and seven other scientists).

Of course, people who are skeptical of the 9/11 Truth Movement's claims may assume – albeit wrongly, from what I have learned – that this journal, being favorable to such claims, may have a less than rigorous peer-review process. And what Chomsky had suggested, in any case, was that 9/11 Truth Movement scientists should submit articles to mainstream science journals, to see if they could pass their peer-review processes.

Jones and other scientists, deciding to take up Chomsky's challenge, started working on papers to submit, and since 2008, at least six papers disputing the official account of the WTC have been published in mainstream journals:

- "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, and James R. Gourley, published in 2008 in the Open Civil Engineering Journal.141

- "Environmental Anomalies at the World Trade Center: Evidence for Energetic Materials," by Kevin R. Ryan, James R. Gourley, and Steven E. Jones, published in 2009 in The Environmentalist.142

- "Active Thermitic Material Observed in Dust from the 9/11 World Trade Center Catastrophe," by University of Copenhagen chemistry professor Niels Harrit and eight colleagues (including Jones, Ryan, Legge, and Gourley), published in 2009 in The Open Chemical Physics Journal.143

- "Discussion of 'Progressive Collapse of the World Trade Center: A Simple Analysis' by K.A. Seffen," by physicist Crockett Grabbe, published in 2010 in the Journal of Engineering Mechanics, which is published by the American Society of Civil Engineers (ASCE).144

- "Discussion of 'Mechanics of Progressive Collapse: Learning from World Trade Center and Building Demolitions' by Zdenek P. Bazant and Mathieu Verdure," by chemical engineer James R. Gourley, published in 2010 in the ASCE's Journal of Engineering Mechanics.145

- "Discussion of 'What Did and Did Not Cause Collapse of World Trade Center Twin Towers in New York?' by Zdenek P. Bazant, Jia-Liang Le, Frank R. Greening, and David B. Benson," by Anders Björkman, published in 2010 in the ASCE's Journal of Engineering Mechanics.146

Given the time it takes to write scientific papers and get them through the peer-review process, combined with the relatively small number of scientists writing about these

issues, this is an impressive achievement. It would seem that this part of Chomsky's test has been met.

These publications demonstrate, moreover, that many of the same scientists who had been publishing in the Journal of 9/11 Studies have now written papers that have gotten through the peer-review process of mainstream science journals. There is no empirical basis, accordingly, for the assumption that the Journal of 9/11 Studies' peer-review process is any less critical. We can, therefore, add the 25 scientific papers about the WTC collapses in the Journal of 9/11 Studies to the six recent papers in mainstream journals, giving us a total of over 30 peer-reviewed scientific articles challenging the official theory about the destruction of the WTC that have appeared since 2006.

I turn now to Chomsky's other suggested way for members of the Truth Movement to test physical evidence that they see as disproving the official story: "submit it to specialists [with] the requisite background in civil-mechanical engineering, materials science, [and] building construction." This has now been done and, as a result, the movement has large and continually growing numbers of physical scientists, engineers, and architects.

The physical scientists (beyond those already mentioned) include:

- Dr. A. K. Dewdney, professor emeritus of mathematics and physics, University of Western Ontario.

- Dr. Timothy E. Eastman, Consultant, Plasmas International, Silver Spring, Maryland.

- Dr. Mark F. Fitzsimmons, senior lecturer in organic chemistry, University of Plymouth.

- Dr. David L. Griscom, former research physicist at the Naval Research Laboratory; principal author of 100 papers in scientific journals; fellow of the American Physical Society and of the American Association for the Advancement of Science.

- Dr. Jan Kjellman, research scientist in nuclear physics and nanotechnology, École Polytechnique Federale, Lausanne.

- Dr. Herbert G. Leberz, professor emeritus, Department of Chemistry, San Diego State University.

- Dr. Eric Leichtnam, professor of mathematics and physics, University of Paris.

- Dr. Terry Morrone, professor emeritus, Department of Physics, Adelphi University.

- Dr. John D. Wyndham, former research fellow, California Institute of Technology.147

With regard to architects and engineers: In December 2006, when Chomsky issued his suggestion, there were few if any architects and engineers who had publicly questioned the official account of the destruction of the World Trade Center. But in January, 2007, architect Richard Gage, a member of the American Institute of Architects (AIA), began Architects and Engineers for 9/11 Truth, and by now its membership includes over 1,200 professional architects and engineers.

Here are a few of the architects:

- Daniel B. Barnum, AIA fellow; founder of the Houston AIA Residential Architecture Committee.

- Bertie McKinney Bonner, M. Arch; AIA member; licensed architect in Pennsylvania.

- David Paul Helpern, AIA fellow; founder of Helpern Architects.

- Cynthia Howard, M. Arch; licensed architect in Maine and Massachusetts; past president, AIA's New England Chapter.

[-cont. in Newsletter No 526]