# **Manuel Garcia Sees Physics That Don't Exist**

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## **Another Opportunity to Understand Our Predicament**

Over the years we've heard from a few educated people who claim to understand and support the latest story given by the US government for the unprecedented destruction of the WTC buildings. Unfortunately, those folks usually turn out to either work for the Bush Administration directly, like FEMA and NIST, or are in some other way profiting from the War on Terror. Some people accept what these Bush scientists say because they have PhDs in scientific fields, or because certain media sources promote the official myths. In a way, the curious behavior of these scientists and media sources allows us to better see the predicament we all face.

With the case of Manuel Garcia, and his three recent, rapid-fire articles in Counterpunch, we appear to have another opportunity to examine the phenomenon of Bush science. Here we see a fully educated scientist making strong supportive statements of the Bush Administration's 9/11 theories, despite the fact that he must know those theories are based on false or unsubstantiated claims. For our own understanding, let's take a closer look at Manuel Garcia and his efforts.

Garcia not only works for the government, he works for a very interesting organization in terms of the best hypothesis for what happened that day. Lawrence Livermore National Laboratory (LLNL), Garcia's employer, appears to be where explosive thermite was invented, and it continues to be a focus of research there. (1) At LLNL, government scientists have learned how to combine the exothermic power of the thermite reaction with organic moieties to produce a thermite reaction that can do pressure/volume work (i.e. turn massive quantities of concrete and other building materials into dust). From the research of Steven Jones, we know that the thermite reaction likely played a role in bringing the towers down, and it would not be surprising if technology developed by LLNL was involved. Could that be why Manuel Garcia is so intent on seeing Physics that don't exist, in order to avoid seeing links to technology developed by his employer?

There may be more to it than that. Notice that there are many aspects about the official story of 9/11/01 that strain credulity, to say the least, but none more so than the "collapse" of the WTC buildings. As with the air defense failures, we've been given several contradictory stories about these events over the years, none of which have panned out. The first was an urban legend that grew, as a result of the long delays in

official commitment, from media reports of extreme temperatures and melting steel. We were given other stories for the destruction of these buildings, but the Pancake Theory, which was the primary explanation offered by FEMA and was the central explanation in numerous media stories, lasted for a period of more than three years. The Pancake Theory recently died a quiet death with the FAQ responses offered by NIST, but as with the urban legend media stories, we have been offered no apologies from those who propped-up the ongoing 9/11 Wars with these false claims.

So when a US weapons scientist, like Manuel Garcia, offers more wild speculation in support of the Bush Administrations' ever-changing stories, we must first recognize that this is not really about serious researchers quibbling over minor details of physical evidence. We must realize that Garcia and his ilk have already given us several false stories for the destruction of these buildings, and those lies have resulted not only in the deaths of hundreds of thousands of people, but have also supported the systematic conversion of America into a totalitarian state waiting to happen. What will become of those Bush scientists if honest people ever achieve the awareness and political will to call for a real investigation?

### **Quantum Behavior**

In his "Physics of 9/11", Garcia offered his new "twisted joints" theory, adding more conjecture to the miasma that NIST spent three years crafting. Garcia may have twisted a few joints himself before writing these articles, but it is clear that he did not put much time into reviewing NIST's WTC report before putting his reputation, and perhaps much more, on the line to defend it. NIST did not actually describe the all-important forces that supposedly pulled in the tower's external columns. In their computer model, these forces were phantom forces, applied to the external columns by sagging floors that had, paradoxically, been disconnected from those columns. Garcia's talk of twisting joints is, therefore, only imaginative conjecture at best.

Garcia seems to admit his own sloppy dishonesty by claiming that high temperatures in the impact zone were sufficient to soften the steel, and that floors in the impact zone sagged. One only has to read the summary of the NIST report to know that the impact zones were far from where NIST says the buildings failed. However, there could be another explanation for this "spooky action at a distance." Garcia may have stumbled upon a new demonstration of the principle of Physics known as non-locality, one in which steel heated in one place causes steel located in another, far away place to soften and fail. That would be amazing if true.

The greater part of this first article is simply wild speculation, a crime in itself at this point. Although NIST admits that many scientists, given millions of dollars and several years to work on it, could not describe the dynamics of collapse for the towers, Garcia makes a one-man job of it in order to put those silly conspiracy theorists in their place. He offers equations and terms like "wave trains" to ensure that those of us who need to "expand [our] range of rationality and hence [our] political maturity" can do so, if only

we can follow his superior thought processes. In Garcia's dreamlike world of superiority, strange things happen. Floors vanish and buildings begin crashing to the ground, as a result of fire-softened steel, at an initial speed of 16 mph. That is, there is no zero point at which such a building begins to drop. These skyscrapers actually exhibit quantum behavior, as large multi-floor sections go from rest to a speed of 16 mph instantaneously! Garcia appears humble when describing this monumental discovery, telling us little about the "rippling wavelets" that make it so. He finally sums up his findings by simply stating that "The towers shattered, and the pieces fell to the ground." Perhaps someone should call the Nobel committee.

#### The Energy Crisis Solved

Garcia's second article, "The Thermodynamics of 9/11", does not improve upon the first. Here he repeats his ridiculous claim of the importance of high temperatures in the impact zone (far from the failure zone), and then states that the "fatal element in the WTC Towers story is that enough of the thermal insulation was banged off the steel frames by the airplane jolts". Of course, those of us who have actually followed NIST's investigation know that they could not produce any "robust criteria" to establish that fireproofing was lost through forces of vibration. Instead, NIST performed a shotgun test to see if the fireproofing could have been lost through shearing forces.

The shotgun test not only failed to support NIST's pre-determined conclusions, as was the case for all of their other physical tests, but it actually proved that the fireproofing could not have been sheared off because too much energy would be needed. This did not deter NIST, as they simply proceeded by filling their computer model with vague, sweeping assumptions like suggesting that the fireproofing was completely removed wherever the office furnishings were damaged (i.e. if a cube wall fell or a pencil was broken, thousands of square meters of fireproofing must have been sheared off too). (2) If it was not already clear that Garcia never read NIST's WTC report, we might think that he got his quantum leaps from them.

Garcia's analysis of the WTC thermodynamics then begins with the removal of all of the fireproofing from all the steel, an unsupported assumption at best. In any case, to consider temperature increases, an honest scientist would take the materials and the energy sources involved, and perform some straightforward calculations to evaluate the available energies. In the case of the WTC towers, we know from FEMA and NIST that about 4,500 gallons of jet fuel were available to feed the fires on the impact and failure floors, giving an energy value of approximately 600 GJ, considering moderate combustion. And we know the buildings had a fire load of 20 Kg/m^2, which would provide an energy value of about 500 GJ for the furnishings on several floors in the vicinity of the failure zones. (3) These realistic values give a total energy of about 1,100 GJ that would be available to heat one building, but Garcia uses 8,000 GJ and 3,000 GJ, values NIST created through their deceptive, pretzel-logic manipulations.

Maybe this incredible energy yield means that Garcia and NIST have solved the energy

crisis, and we can end the 9/11 Wars and bring our troops home. If not, maybe Garcia can help us understand where all that additional energy came from, instead of just spouting off with so much arrogance. We really would appreciate it.

In the absence of this explanation, Garcia proceeds to apply this tremendous amount of mysterious energy to the heating of the materials involved. But instead of taking the quantities of steel, concrete, and other materials into account (don't forget the aircraft itself) Garcia helps us to "expand our range of rationality" by dumbing-down the scenario using a "fictitious homogenized" substance called "ironcrete". Garcia muddies the water with his ironcrete because, although he doesn't give the calculations, this allows him to use a sleight of hand, giving a value for specific heat that is less than that of any of the starting materials. Few would notice, but this means that, in support of Garcia's purposes, it takes less heat to increase the temperature of each kilogram of ironcrete than it would to increase the temperature of the steel and concrete used in the WTC towers. Since he's using eight times more energy than could have been available anyway, this minor scam doesn't seem worth the effort.

But note that Garcia also suggests all the available heat became trapped in his ironcrete, thereby assuming that no hot gases left the impact zone, that no heat escaped by conduction, and that the steel and concrete had an unlimited amount of time to absorb all the heat. He also conveniently ignores all the other materials in the aircraft and the buildings, including the Aluminum, all the office furnishings, and the vast amount of air and water vapor, all of which would be heated too, absorbing energy. Considering his quantum mechanical collapse dynamics and magical fireproofing loss, these distributions of heat energy may not seem so strange, that is until Garcia needs that energy back to support his later claims of melting Aluminum, plastic "cracking" to create dense pockets of hydrocarbon vapors that mimic high-explosives, and even a replay of the beginnings of life on earth (no kidding).

#### The Dark Matter of Intelligent Fuel

By the time we get to Garcia's third article, we're either believing this guy is the greatest scientist in history, or we're understanding that his series in Counterpunch may be something more of a sucker punch. In this third article, "Dark Fire", Garcia claims to have single-handedly solved the problem that baffled FEMA and NIST, as well as all objective people around the world -- the collapse of WTC 7.

Now if Garcia had proven the quantum behavior of large objects, and had developed a method for extracting eight times the normal amount of energy from a gallon of hydrocarbon fuel, as his previous articles suggest, we might be intrigued. Maybe the title of this third article is a reference to the combustion of the elusive dark matter that Physicists have long sought after. Let's take a look.

The challenge of explaining the collapse of WTC 7 was described by Jim Hoffman with the following three points.

- \* This steel-framed skyscraper collapsed into its footprint with all the characteristics of a standard controlled demolition.
- \* No other steel-framed building that collapsed for any reason has ever shown any of those features -- let alone all those features.
- \* No other tall steel-framed building has ever collapsed from fires -- the primary cause of WTC 7's collapse according to the official story.

Additionally, we know that FEMA spent eight months of exhaustive work on the investigation, finally claiming that "The performance of WTC 7 is of significant interest because it appears the collapse was due primarily to fire, rather than any impact damage from the collapsing towers." They then added that their "best hypothesis has only a low probability of occurrence." NIST has spent several years trying to come up with a legitimate, non-explosive explanation, so far without success. But our hero Garcia takes FEMA's low probability scenario, embellishes it a bit, and boldly declares "This is what happened", leaving no room for doubt.

The initiating event of Garcia's low probability theory is a "hot volley" of "incandescent metal and heated stone" that destroyed a fuel oil distribution pipe in the southwest corner of WTC 7. Where the stone came from we'll never know (maybe it was an asteroid), but the probability that the temperature of the steel from the towers, which NIST measured at 250 C, could cause that steel to glow in incandescence, is essentially nil.

FEMA pointed out a string of improbable events that would need to come together for the rest of this story to pan out, but they made clear that the biggest problem was that WTC 7 first began to collapse on the east side, far from the distribution pipe that Garcia builds his story on. This means that the fuel oil released from any such breakage would need to exhibit the features of an intelligent migration, pumping up from multiple tanks on the ground floor, through the damaged pipe in the southwest corner of the building, traversing a distance of 250 feet across the fifth floor without any spreading or transfer loss, to pool very selectively beneath truss #2 in a mechanical room on the east side of the building.

This theory depends on much more creative guesswork, including the following.

- \* None of this intelligently migrating fuel oil found its way to the containment vessel that was designed for such an event, and therefore never triggered the safety mechanism that would automatically de-energize the pumps.
- \* The authorities that decided not to fight the fires in WTC 7 also decided not to cut the power to these pumps, allowing them to spray oil within this burning skyscraper, for up to seven hours, in the middle of Manhattan.

- \* The pooled fuel oil was somehow heated to a sufficient temperature for ignition, at which point an unknown ignition source initiated an efficient, multi-hour burn.
- \* Although now situated in an enclosed room with limited space, the oil found limitless Oxygen in order to extract every bit of energy from the assumed maximum amount of 12,000 gallons.
- \* The fires generated by this burning fuel oil centered in a highly specific formation directly beneath that critical truss, and the heat produced was perfectly contained and directed at the truss itself but nowhere else.
- \* This truss-specific fire raged for up to seven hours but was never visible from any external view.
- \* This miraculous fire then caused the failure of that one critical truss, which somehow initiated the total collapse of this 47 story building in just 6.6 seconds.

Garcia's "Dark Fire" piece might as well have been about the combustion of that elusive dark matter, because even if we really wanted to believe his extended string of astounding events, he doesn't address the primary problems of the collapse dynamics. Instead, he simply states "a progressive collapse propagates up and material falls freely." And as with the work of NIST, we're expected to believe that just saying so makes it true.

## **Begging Off and Catching On**

When questioned more closely about his speculative articles, Garcia claimed in an email that he was done talking and writing about these issues, and that folks would need to rely on the authoritative information provided by Frank Greening and Popular Mechanics. In this plea, Garcia says that Greening's results jibe with his, although he was unaware of Greening before he wrote his series. It is clear from his "thermodynamics" piece that Garcia might subscribe to Greening's "Fruit Crumble" theory, where ultra-fine Aluminum and Iron Oxide spontaneously form in the buildings to produce "natural thermite", distributed in just the right forms and places. It could be that Garcia would buy Greening's "They Just Forgot to Use the Bolts" theory as well, if it comes to that. (4)

Government scientists get paid to support government policies, particularly in this era of "Bush Science", and clearly Garcia is willing to play along. But why would political news organizations, like Counterpunch, that present themselves as alternatives to the corporate media, promote these false claims?

Consider for a moment the implications of a breakthrough in the truth about 9/11. If the official story about 9/11 is completely false, as it has proven to be, that fact should call into question those media sources who have helped to cover-up the details over the last five years, even if only through gross negligence of the facts. Whether or not collusion with alternative media was involved, if there is a possibility that the neo-cons actually

helped in planning or executing the attacks, then the fact that they pulled it off means that Alexander Cockburn and other (ostensibly) liberal leaders might no longer enjoy the "irreverent and biting" superiority that they identify themselves with. It could be very distressing for some of these rebel leaders to realize that instead of "muckraking with a radical attitude" they have spent years meekly bolstering the status quo.

It appears that these kinds of realizations are inevitable, and actually offer us a chance to improve our situation. In the US, we'll soon have more opportunity to notice the default states in which we are expected to accept scientific authority no matter how illogical, and accept a cartoonish political framework no matter how impotent. In the next few months, these opportunities will come like "hot volleys" from Manuel Garcia, providing stark examples of how pretentious "experts", and other types of fictitious, homogenized (ironcrete) leaders give no real alternatives to the problems we've seen in the last five years.

If our new Democratic Congress will not call for impeachment or a new 9/11 investigation, will they at least repeal the Military Commissions Act, or the Patriot Act? Will they stop construction of Halliburton's secretive "detention centers" or put an end to the illegal 9/11 Wars? Will our government's efforts to protect us from unexplained terrorism ever stop looking exactly like the efforts they would take to protect themselves from us? In other words, will these new leaders, in practice, be any different than the neocons? Over the next few months we will realize the answers to these questions, and perhaps then we can begin taking more responsibility for the deception in our lives.

#### References:

1. There are numerous articles available from LLNL on thermite research. For an example of explosive thermite, see try this one.

http://www.llnl.gov/tid/lof/documents/pdf/307362.pdf

2. Therese McAllister explains NIST's vague, sweeping assumption of fireproofing loss in her presentation here.

http://wtc.nist.gov/WTC\_Conf\_Sep13-15/session6/6McAllister.pdf

- 3. For effective energy flow from one kg of office furnishings, use estimate of 8.4 MJ/kg (a value for wood -- probably a little higher than for the materials involved). See Sfintesco, editor, Fire Safety in Tall Buildings, McGraw Hill, 1992
- 4. Gordon Ross explains some of Greening's desperate sounding theories here. http://www.911blogger.com/node/4867