INTERVIEW WITH DR. JUDY WOOD AND DR. GREG JENKINS

National Press Club, Washington, DC, January 10th 2007

Transcript by Arabesque

Analysis by Dr. Greg Jenkins and Arabesque¹

Jim Fetzer: "I must say I think we're finding out Judy, what happened on 9/11. I'm just blown away by your work. This is the most fascinating development in the history of the study of 9/11... I'm going to make a wild guess Judy; I'm going to presume that these [directed energy] beams had to be located in Building 7?"

Judy Wood: "Nope. I don't think so."

Fetzer: "Planes?"

Judy Wood:" No... I think it's very likely it's in orbit."

Fetzer: "Oh Really?? Oh ho ho ho! Oh Judy. Oh my oh my oh my oh my. This is huge... this is huge Judy."²

Abstract:

As the above quotation suggests, Dr. Judy Wood is one of the first and foremost supporters of the hypothesis that Directed Energy Weapons destroyed the World Trade Centers on 9/11. This topic is discussed and analyzed in the following interview between Wood and Dr. Greg Jenkins on January 10th, 2007. The relevant features of Judy Wood's hypothesis are discussed and shown to be wholly inadequate and unscientific. Many of Wood's weakly supported arguments rely on misinterpretations about "what happened" that are subsequently used to advance misleading explanations for "how it happened". The topic covered in this interview is also dealt with extensively in Dr. Jenkin's paper, The Overwhelming Implausibility of Using Directed Energy Beams to Demolish the World Trade Center.³

Transcript and Analysis of the Interview⁴

 $GJ: = Greg\ Jenkins$

JW: = Judy Wood

GJ: I'm speaking today with **Dr Judy Wood**. She received her BS in Civil Engineering in 1981, MS in Engineering Mechanics in '83, and PHD in Materials Engineering Science in 1992 from the Department of Engineering Science and Mechanics at Virginia Polytech Institute and State Institute at Blacksburg, Virginia. From 1999 to 2006, Dr Wood has been an Associate Professor in the Mechanical Engineering department at Clemson University, South Carolina. Among other skills she is an expert in the use of Moiré interferometry, a full-field optical method that is used in stress analysis. And, I wish to

extend my thanks to Dr Judy Wood for taking time out of her schedule for this interview, and on behalf of our ragtag band called DC911Truth⁶ I welcome you.

JW: Thank you.

GJ: Well, thank you. I guess the first question is: you have come up with some ideas regarding space-based weapons and the demolition of the World Trade Center Towers, and I was wondering if you **could give us an overview of the proposed types of weapons** that could be used for such a thing.

JW: Uh... We haven't got into listing them yet—Just Energy Weapons.

GJ: *In what form?*

JW: (stuttering hesitantly) Uh... I don't think we even need to define it.

Evasion #1:

This is analogous to speculating that 'people caused the towers to collapse,' and then claiming 'we don't need to define who those people were'! Since the term 'people' is so general, we are left with a theory that is hopelessly vague. Effectively, by evading this basic question Wood has left little room for critical debate or analysis. Similarly, the term 'Energy Weapons' is also vague—resulting in a speculative theory devoid of substance.

The question: "in what form [of Energy]" is fundamentally basic. Energy comes in a huge variety of forms: plasmas, nuclear, electric current, electromagnetic radiation (radio waves, microwaves, laser beams, x-rays, etc.), ion & neutral particle beams, electron & proton beams, chemical reactions, kinetic energy weapons, etc. Leaving the type of 'energy' undefined essentially leaves us with no theory at all. As for types of beams, "there are only two …those that have mass (particle beams such as protons, ions, neutral atoms, or electrons) and those that do not have mass (photons)."

JW [continuing]: What we did was assemble all the pictures—evidence that we trusted, and just going through the evidence—just looking at it. At that point what motivated this paper was...wait—we've been told this story, that story—let's wipe the slate clean and start over. Let's see what evidence we do believe instead of relying on this rumor mill. We're told about molten metal that nobody has ever seen pictures of—these rumors of molten metal.

Misleading Argument #1:

This statement about molten metal is misleading for several reasons. Appendix C of the FEMA report noted that there was "severe corrosion" of "structural steel members" and independent investigators observed "intergranular melting" of "steel" from ground

zero. Although there do not appear to be many photographs of running molten steel, there are many eyewitness statements. There are also photographs of red-orange metal, and several photographs of *previously molten metal*. New studies by Dr. Steven Jones reveal *thermate compounds* in *iron-rich metallic spheres* from the dust at ground zero. These studies indicate that many of the dust samples had *high percentages of molten iron* in them. Jones' analysis of iron rich spheres is corroborated by official USGS studies that claim that these spheres are "frequently seen". Especially noteworthy is a sample of dust taken from the 4th floor of an apartment about 100 Yards away from South Tower. This sample also contained metallic spheres, indicating that there was molten metal *during* the collapse and that this material was ejected a far distance away from the towers. This data further supports Jones' hypothesis that thermate and possibly variants were used in the destruction of the World Trade Center Towers.

JW [continuing]:Let's see if we can find any pictures of it. Let's see what we can see. And so I started looking through [many] pictures. What were they telling us—what's the evidence? And what categories of information? And you start putting these categories of information together and it turns the building in one direction and eliminating various other possibilities.

GJ: No matter what the beam that is used in this situation, will involve—I guess **the term** you use is 'dustification' of metal...

JW: I thought I'd invent a new word.

GJ: *Might as well, right?*

JW: Poof!

GJ: ...or the vaporization of the metal in the towers, one or the other. Have you had, do you have any energy calculations at all to get a scale for what is involved for doing that?

JW: Yea, but [stuttering] we don't need to get distracted by those values.

Evasion #2:

No scientist or physicist would ever consider a simple energy calculation a distraction. As stated later in the interview, "Conservation of Energy is NOT a distraction!" It is a basic tenet of physics that should be taken very seriously—not disregarded as a 'distraction'. In actual fact, the entire directed energy hypothesis is a distraction until it can address this serious problem: "The energy required to vaporize all the steel from both towers was pumped into the towers during the collapse time, approximately 10 seconds... is over 5 times the total power output of the entire earth including all carbon combustion, nuclear power, wind power, hydroelectric power, etc. This is with no loss." ¹⁵

JW [continuing]: **If you look at the pictures**, if you look at the scrap pile that when it was all done with, is there any question that the building was pulverized?

Misleading Argument #2:

Pulverization is also characteristic of controlled demolition because "explosives powerful enough to slice steel will pulverize concrete and most other non-metallic substances into tiny particles." According to first responders at ground zero, there did appear to be substantial pulverization. However, Judy Wood argues that most of the building from the towers never hit the ground. In Wood's interpretation, the two towers were almost entirely turned to dust including most of the steel. Her claim that not enough debris was visible on the surface at ground zero is not supported by any quantitative analysis. Her argument that most of the steel turned to dust is based on misinterpretations of photographs—an analysis that is inherently problematic since pictures only show the debris on the surface. Analysis of the sublevel collapses accounts for a huge percentage of the debris from the entire WTC complex. Most of the debris is not visible in many pictures since it is located in piles, both above and below ground. In comparison, WTC7's debris pile was relatively small in height; this is typical for controlled demolition.

GJ: Well I do have some questions... I've come up with an energy scale for the problem. If you use, like, say, a photon beam—a laser beam of some kind, you run into some problems, namely, the amount of energy required to evaporate the steel in the towers is...

JW: Wait, you're specifying evaporation?

Evasion #3:

Judy Wood interrupts the question before it is completed and changes the subject to avoid discussing this major problem with her hypothesis. [Read also evasion #2.]¹⁹

GJ: Sure.

JW: What about dustification? Is that what we're talking about?

GJ: You want to talk about dustification?

JW: Well, pulverizing the building is turning... the building contents into Nano-dust, we'll call it.

<u>Comment:</u> Wood's statement that the WTC was turned into "*nano-dust*" has no evidential basis in reality. Nano used in the scientific vernacular is defined as the number 10⁻⁹. Debris is considered to be dust when the particle sizes are between roughly 1 and

100 microns (10⁻⁶ m = 1 micron). Debris which is smaller than 1 micron is generally considered to be an aerosol. The size of atoms is roughly 1 nanometer (10⁻⁹ m). Any reasonable translation of the language Judy Wood is applying here leaves the listener to conclude that Dr. Wood's opinion is that the WTC towers was dissociated into individual atoms! There are a multitude of reasons this is an *absurd* claim. One strong argument against this argument is that *the power required to atomize all the steel, concrete, and building contents would be much larger than 5 times the global power harnessed by human beings*. Wood's statement is also not supported by official USGS studies. See Misleading Argument #9 for more discussion of this.

GJ: Okay. Right now, I don't know... has this been done in the laboratory? Has anything been done that would turn steel into dust?

JW: Uh-huh.

<u>Comment:</u> These tests by Wood appear to have been done in her imagination—she does not name any credible experiments which can turn steel into dust. Wood describes this undemonstrated process as "dustification".

G.J: What?

JW: Various types of energy beams.

<u>Comment:</u> Again, Wood is not specific here. Even worse, the specified experiment mentioned below is incapable of turning steel into dust.

GJ: What kinds of energy beams?

JW: Well let's see... you put something in your microwave oven and leave it on there extra long and see what happens to it.

Misleading Argument #3:

Microwaves will never turn **steel into dust** in a microwave oven; especially since the reflectivity of steel is well over 99%. ²⁰ An essential component of the scientific method is that a hypothesis can be tested with experiments. If a theory can not be tested it is called *non-falsifiable* and it is **not** considered a scientific hypothesis. ²¹ In other words, if Judy Wood can not suggest experiments to test her theory, she will never be able to prove it. She might as well argue that invisible wingless flying ducks destroyed the World Trade Center.

GJ: *That's food. That's not metal.*

JW: Or something else.

GJ: If you put metal in a microwave it will reflect off of it.

JW: Hey! **I've been trying a fork in there**. I know you're not supposed to, but I wanted someone else to do it, **to see what happens**.

<u>Comment:</u> Judy Wood claimed that she had performed experiments which can turn steel into dust. A microwave oven will never turn a fork into dust.

GJ: Yes, it's kinda fun. Also, if you burn a disc, like a CD or something, stick it in the microwave. It makes a nice little show for you, so you might try that. It's kinda a fun thing to do. ²² But, the thing is, I don't know of a way to dustify steel in any situation, and...

JW: [stuttering] Let's talk about physical principles. If you heat steel... some type of... [a] particular kind of element, and heat it with a particular vapor pressure, it evaporates.

GJ: It evaporates, yes.

JW: So if you have enough temperature, enough energy, you can quickly put a lot of energy into something—it'll go "poof".

GJ: It will evaporate, yes. Correct.

JW: And if you do that to one surface, maybe the surface right below there, it doesn't necessarily do the same thing to [it], because there's a different process going on from the direct hit and the indirect hit.

GJ: That depends on the heat conduction of what you're trying to evaporate.

JW: No. not heat conduction! We're talking about an effect on a molecule. Why does the paper towel in your microwave not burn when water heats up?

Comment: Judy Wood appears to try to convey that if 'some kind of energy' was applied to a material quickly, then only a local area of the material may be rapidly heated. This is true, but it depends upon the heat conduction of the material you are using. That is, if the time scale in which you pump in the energy is slow compared to the time it takes the heat to be wicked away via heat conduction, this effect will not occur. If you pump in heat fast enough compared to the time scale associated with heat conduction, you will only locally heat the material.²³

G.J.: Because it doesn't have water in it.

JW: Right. So the energy does one thing to paper, and does another thing to water.

GJ: That's because microwaves are absorbed by water, and the paper in the towel is not absorbed by water. ²⁴ It has to do with the resonant energy of water. ²⁵

JW: So if you have some kind of energy you can put into a particular element... that excites that particular element... ²⁶

GJ: If you excite an element you're talking on the order of the scales of eV to excite the electrons. If you're talking about a crystal, then you're talking about the bonding energies associated with that crystal. So if you're talking about steel...²⁷

Evasion #4:

Judy Wood once again interrupts and changes the subject after the problem of turning steel into dust returns.

JW: [stuttering] Hang on, hang on. There's a slide that presents this information that I've started using. **First you figure out what happened**,

<u>Comment:</u> Agreed. This of course assumes that we don't first start with misleading interpretations/explanations that obfuscate what happened. There are many examples of this kind within this interview. We are doubly confused when presented with misleading versions of what had happened and how it happened.

JW [continuing]: then you figure out how it happened, then maybe why it happened, then who done it. But you've gotta start and do it in that order. You've got to figure out what happened. What happened doesn't depend on what you know about, and here's the example I gave in Seattle. Let's say you know, the slingshot, the BB gun, and... a firecracker. That's all you know about. So you can only pick from those if you're going to describe what happened to the Twin Towers. Does that make sense?

Misleading Argument #4:

This is a straw-man argument. The Scientific method does not ignore possibilities or necessarily begin with pre-determined conclusions as suggested by Judy Wood. It observes phenomenon, determines a hypothesis, and most crucially—*tests* the hypothesis with experiments. Clearly, the concept of falsifiable experiments has been ignored by Wood. Also characteristic of the scientific method is the rejection of theories when they are proven false with experiments. This of course can't happen when a theory is unable to be tested.

GJ: No. I don't understand.

JW: If you don't know about it, it doesn't mean it didn't happen.

Misleading Argument #5 (see also #4):

This statement is a straw-man argument. **Just because we don't know about it doesn't mean it** *did* **happen.** What is relevant is that the scientific method is used to determine a hypothesis—*any hypothesis*, and then test it with experiments. As soon as we start to debate things that can't be proven we are no longer dealing with science—we are in the realm of opinion, faith, and unanswerable speculation.

JW: *If I can figure out what happened first, then how it happened is down the road.*

GJ: Ok, can we talk about your analysis on what happened?

JW: Ok. That's really where we are right now. We don't know the serial number on the gizmo that was used, or was it something light came off of...

Evasion #5

Judy Wood will have to figure out the "serial number on the gizmo" or demonstrate an experiment to prove her hypothesis. She has provided neither, and her theory remains non-falsifiable. Indeed, her hypothesis is too vague to test as the form of energy employed by the proposed 'gizmo' is left unspecified. This leaves us a theory that is ill-defined as well as non-falsifiable. Even more suspect is the fact that Wood has not even proven her case for "what first happened" before determining "how it happened".

GJ: Okay. So, one thing that is puzzling to me that you had calculated the ratio of a building that was the Kingdome, right? And you looked at the ratio of before collapse height to the ratio of after collapse height...

JW: Not the height—the mass. These are approximate ballpark numbers...

<u>Comment:</u> This statement by Wood is nonsensical; she does not analyze the *before and after collapse mass* of the Kingdome as they are obviously going to be the *same* amount. She should be able to remember simple details such as these as they are an important part of her theory. Since this interview in January, she has failed to address any of these legitimate criticisms and has repeated arguments and misinterpretations of evidence that have been demonstrated to be misleading.

GJ: You've come up with 12%, or something like that, for the before and after collapse height.

JW: *Uh...* [trying to remember] it's been a long time since I looked at those numbers—the Kingdome was 30 feet, and I think it was something like 250, originally?

GJ: Well, I have the number, and you quote on your website as it being... it could be 12 point something percent, but it was about 12%.

JW: That page is in the most rough state possible. You can probably see it's half done, we haven't really touched that really since I first started posting it, so I'm not really familiar with the numbers now because it's been so long...

GJ: Okay. That's fair enough.

JW: I haven't done the triple, double checking, but I've looked at general trends, and the general trends—you have a 30 times difference in potential energy. That was the biggest thing I'm focusing on. Now looking at the rubble pile when you're all done with, let's look at the pictures. You know, exact numbers—who cares? Let's look at the pictures.

Misleading Argument #6:

Wood uses an unreliable scaling method to determine how much rubble has been left at the WTC towers and "offers no analytical measurement of the debris present after the WTC tower collapse. Instead, she vaguely and non-quantitatively refers to pictures where it is speculatively assumed to be self evident."²⁸

Seismograph readings were used by Dr. Wood as evidence that much of the debris from the towers never hit the ground. She used an erroneous scaling argument in which the Richter scale reading measured from the collapse of the Kingdome is compared directly to the potential energy of the Kingdome. Based upon this analysis, she then scales the potential energy to obtain a hypothetical Richter scale reading. This hypothetical Richter scale reading is significantly larger than that actually measured from either WTC Tower collapses.

Her analysis is profoundly flawed. Consider the following example. The M_L (similar to Richter scale reading) reported for the North Tower is 2.3. The M_L from the raw amplitude seismograph readings for WTC 7 is 1.0. Even though the potential energy of the North Tower compared to WTC 7 was about 5 times larger, the energy derived from the Richter scale measurements is 87 times larger. It would be absurd to conclude from this that most of the debris from Building 7 never hit the ground.²⁹

JW [continuing]: You have these little people, look like tiny ants, this huge outer edge of the Kingdome...

GJ: Correct.

JW: ...and, if you recall at the World Trade Center, when they were looking for survivors and they had the rescue workers—they worked horizontally, And they were pulled down. They didn't have to climb up over, you know, many times their height.

GJ: So in that ratio, if you do look at the numbers and you use your analysis for the Kingdome...

JW: Which numbers?

GJ: On your website you had stated a certain average height of the Kingdome before collapse, and a certain height...

JW: The center of it or just the average shape? And it really would have been lower if you looked at the actual... I was looking at easy to find numbers, but the error would be in favor of, it would make a thirty times bigger number.

GJ: Okay it would make it bigger than your 12%

JW: *Because I have it that it's too high already.*

G.J: *I see*.

JW: Because the roof is very thin.

G.J.: Yes, it is.

JW: And so if I'm saying just from the shape, you have the cylinder with the spherical cap on it, and I'm saying it all is the same weight per volume. And the top part's really thin. You're giving it too much benefit, so that's making the center of it too high...

GJ: Correct, and I agree with that, I definitely agree that's a good way to look at it.

JW: *The error is in... the 30 is a low number.*

GJ: Right. Now, on the rim of that, where you take the after-collapse height, the rim is mainly structural concrete.

JW: I'm not talking about the whole volume of the thing, I'm talking about... there's quite a lot of places where somebody measured that. I didn't measure it. According to the reference I provided, that's the number they gave. Then I look at the comparative height. The towers were a whole lot taller to begin with. About four times or so?

GJ: The towers were 110 floors, roughly 12 feet, and so they were about 1350 feet tall.

JW: 1368.

G.J: Yes.

JW: I don't remember exactly the equivalent in stories of the other one...

GJ: Well, if you take the collapse ratio and say it's 12% of the height, then it would be 13 or 14 floors you had come up with on the debris height. That's what you did on your website.

JW: I haven't looked over that page in a while.

GJ: *I'm just trying to refresh your memory.*

JW: I thought I'd made some equivalent of how many floors the 250 feet was worth at the Kingdome. But in any case, I said that 13 or 14 floors... if you start looking around the site, is there anything that's that tall?

GJ: No, but it didn't collapse in on its footprint either.

JW: True. Why didn't it?

GJ: Because it didn't. Where did it collapse? It collapsed in a radius six times its footprint.

JW: Six times its footprint?

Misleading Argument #7:

Wood's analysis is flawed since the WTC towers collapsed in a radius of about six times its footprint. In contrast, the Kingdome's debris collapsed within its footprint. As a larger footprint would mean a larger distribution of debris, it would not be accurate to compare the example of the Kingdome to the WTC Towers. Judy Wood never acknowledges this point in the interview, and evades questions that relate to this fact repeatedly. As well, much of the debris from the WTC collapsed into the sublevels—as is typical in controlled demolition.

GJ: Yes.

JW: I think if you want to count its material it's probably like... a million times its footprint. It went in the upper atmosphere. You know, where do you stop counting it? Is it a mile away—the dust...?

Evasion #6:

Wood irksomely evades discussion of the debris field [see <u>misleading argument #6</u> and <u>#7</u>] with her unproven interpretation/hypothesis that debris went into the 'upper atmosphere' during the collapse [misleading argument #8].

Misleading Argument #8:

There is no evidence that any significant amount of dust "went into the upper atmosphere" during the collapse of the WTC towers as Wood claims, and she makes use of misleading interpretations of photos to support this theory and also misrepresents official USGS studies.³¹

GJ: You can take any kind of distribution you want. The rough radius roughly makes an area six times bigger, if you look at the debris coming down off of that building.

Comment: A scientist can speak of 'distributions' and know what another scientist is saying. In this case, a distribution is the precise form that the debris may be dispersed. For instance, a Gaussian distribution of debris would be a bell curve centered upon a tower, and the radius may be defined as either 1 or 2 standard deviations. Another example could be an exponential distribution where the amount of debris tails off exponentially from the center of the tower, and the radius defined as the 1/e point. No matter what the distribution, one can always define a radius within which the majority of the debris from the towers is located.

JW: But what are you calling debris? Are you calling this Nano-particles?

GJ: Nano-particles?

Comment: Again, 'nano-particles' is a nonsensical term in reference to the debris generated from the towers. Particle sizes on the scale of a nanometer (10⁻⁹ meters) are normally called 'elements' and 'molecules'.

JW: The very fine, ultra-fine dust that was in the upper atmosphere for months.

Misleading Argument #9:

Official studies indicate that "the particles in greatest abundance (mass) in the dust were the unregulated supercoarse—not the ultra-fine." 32

GJ: The dust was an average of 70 microns large.

<u>Comment:</u> At the time, Dr. Jenkins was judging the average size of particles based upon dust samples from Lioy et al.³³ Debris captured during the collapse collected from Janette MacKinlay's apartment (113 Liberty Street just across from the South Tower) shows that 75% of the debris was larger than 1.3mm by weight thus suggesting that the average size particles are much larger than 70 microns.

JW: Which dust?

GJ: ... of all the dust that was sampled by USG.

JW: Did they sample the stuff in the upper atmosphere?

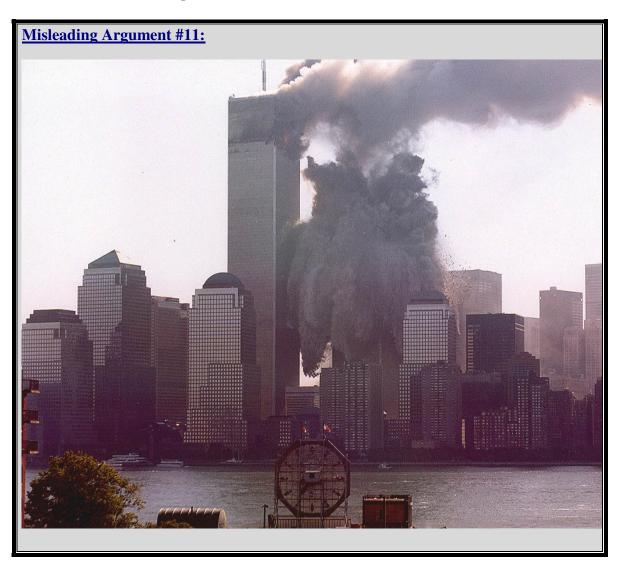
Misleading Argument #10: [see also #8]

As indicated below by Dr. Jenkins: "A lot of that (quite possibly all of it) was the oxygen-starved fire that was going up into the upper atmosphere."

GJ: I didn't see a lot of stuff go up into the upper atmosphere. I saw it all come down first, and then it spread out at that point. So as it's coming down...

JW: Maybe you should review the pictures.

GJ: I have reviewed the pictures.





It appears that Judy Wood needs to review the pictures. One of the more common features of 9/11 misinformation/disinformation is the promotion of arguments that rely on misinterpretations of photographs. This is yet another example of this phenomenon.

These two photos are described in a letter publication (Introduction To An Interview With Dr. Judy Wood Conducted At The National Press Club in Washington, D.C. on January 10, 2007 Regarding The Use Of Directed Energy Beams In The Demolition Of The World Trade Center Towers).³⁴ **Both pictures** represent approximately the same **instant in time** of the collapse of the south tower. The picture on the bottom was presented to Dr. Judy Wood (minus the red labels) and was taken directly from her website. It is a proclaimed 'favorite picture', and

is a point of discussion during the interview. Dr. Judy Wood repeatedly points to the smoke emanating from the north tower as evidence for her argument that the south tower "fell up". However, the smoke was present before and during the collapse so could not be emanating from the south tower due to collapse. This can be clearly seen in the above photo. The photo on the left is used by Wood to suggest that debris from the South Tower is rising into the upper atmosphere, when in actual fact the photo above reveals that it is simply smoke from the North Tower.

JW: The video that I have of the Kingdome... where the roof height is...this is about the highest where the dust comes up (indicates). The thing goes 'poof', it goes down, it goes sideways. It doesn't go into the upper atmosphere. And if you look at—well, even Jim's pictures he showed tonight. The 'fingers' coming up. They go up and up and up.

GJ: A lot of that was the oxygen-starved fire that was going up into the upper atmosphere, because it was there even before and during the collapse.

JW: There are some smoke bombs going off.

GJ: My point is not really what it was, but it was there before and after the collapse.

JW: After the quote, "collapse", you have this ultra-fine dust going into the upper atmosphere. How long does that oxygen-starved fire survive in the upper atmosphere?

GJ: How do you know it was ultra-fine dust and what do you mean by that?

JW: Why is it going up?

GJ: Because of the hot air—it's not really the issue. We're talking about the radius of the collapse field.

<u>Comment:</u> Dr. Judy Wood is literally attempting to **argue that the WTC Towers fell up, not down**—an "anti-collapse" theory. In order for the buildings to fall up, the weight of the entire WTC Towers plus the modest increase in temperature of the air (which necessarily could not be that much since optical distortions are not visible during the collapse in video footage) would necessarily have to weigh less than the air it displaces, a provably absurd assertion. This is the concept of buoyancy, a very basic physical principle.³⁶

JW: Have you seen some of the satellite images?

GJ: I've got pictures right here, if you'd like to see them.

JW: *It goes over, maybe—it covers the East Coast, the Eastern Seaboard.*

GJ: Right. Eventually it does, because of diffusion, and just the heat of the energy being expelled will make that expand out. Now, if you look at this picture... it's taken off of your website.

JW: Thank you. This is a good example. It's going straight up. Imagine that.

<u>Comment:</u> Wood is referencing the bottom photo indicated in <u>misleading argument #11</u>. Wood is claiming here that **debris from the South Tower is going up**; when it actually appears to simply be **smoke from the North Tower**.

GJ: That was smoke that was there before the collapse.

JW: What, down here on the fiftieth floor? The fortieth floor? I thought the fire was up at the eightieth floor.

GJ: I know all that dust...that's in that picture right there... **that dust was there before the collapse, because that's the smoke coming from the fire**.

JW: But this (points to Banker's Trust building) is a forty-story building, so this is emanating it appears from the fiftieth floor.

GJ: What's emanating form the fiftieth floor?

JW: The stuff that's going up.

GJ: How do you know the stuff emanating from the fiftieth floor is going up?

JW: It's not going down. Haha.

GJ: There's a lot of stuff going down in that picture, that's my whole point.

JW: You've just gone around the circle. You're saying it was there before the tower went 'poof?' But the tower is in good condition up until about the seventieth floor or whatever it was.

GJ: It wasn't that high.

JW: I didn't see the fire down here.

GJ: Could we go back to the original point? I mean...

JW: But this is what you're asking about here.

GJ: I'm asking about the radius the debris falls on the ground.

JW: Wait a minute! Because this wasn't working for you, you wanted to change to another subject?

Evasion #7:

Ironically, Wood is the one who changed the subject in the first place and here implies that it was interviewer who wants to change the subject. Ultimately, Jenkins' question about the debris field remains unanswered in the interview.

GJ: No.

JW: We'll stay with this one. Here the dust is going straight up. Well, that's where we came from because you were saying the dust all went straight down, and I'm saying the dust goes up, and I'm using this picture to emphasize that it goes up. Here's about where the fiftieth floor would be. If that's a forty-storey building, the fiftieth floor is probably around there, and it looks like all the stuff coming up is coming from there.

G.J: (*No reply*)

JW: So where's the rest of the building?

G.J: Well. I... I don't know.

JW: *Oh, wait a minute, You're saying it burned up, in four seconds? Five seconds?*

GJ: I didn't say the building burned up. I said there was smoke from the fires that went up.

JW: But if there were some fires, fires were up here (indicates). This was fifty stories, so where would that make 110 stories, like up here? (indicates on the picture)

GJ: It wouldn't be that high, no.

JW: Well, we don't see the bottom of the building.

GJ: But you know roughly what the width of the building is, that ratio.

JW: It's somewhere up here, off the page.

GJ: The width of the building is 200 meters and the height is like 1300 meters.³⁷

JW: 1368. And we don't see the bottom here. The bottom's down there somewhere. So, if this is a forty story building here, we don't see the bottom of the building. It's probably about that big. We're now up to the eightieth floor, so it's going to be about somewhere in there. So if you have something up here—and that's where the fire was—why is the smoke coming from down here?

GJ: *I don't know why it is coming from down there.*

JW: What about this part of the building (points to top)?

GJ: From that picture it looks like a lot of it goes down.

JW: Where's it going down?

GJ: You don't see any parts of the building going down there?

JW: I see that we have about one third of the building left. Two thirds of the building is missing, and it's not in the volume of this 'snowball' as I call it, to account for two thirds of the building.

Misleading Argument #12:

Visual inspection shows that the volume occupied by the dust cloud is larger than the amount of building which is missing, and therefore the debris is less dense than the building:

For reference, use the top picture referenced in <u>misleading argument #11</u>. Look at one side of the south tower and estimate the volume occupied by the debris cloud on that side.

For the south side of the south tower, the volume of the dust cloud is about 1 tower width x 1 tower deep x $1/5^{th}$ the tower height. Since there are 4 sides, the total volume occupied by the debris cloud is roughly estimated to be $\sim 4/5 = 80\%$ of the initial buildings volume. *This is much larger than the 1/2 to 1/3rd of the building which is missing*. The volumetric change can be calculated as $4/5 / 1/2 = 8/5 \sim 160\%$. The debris cloud is appreciably less dense than the building since it occupies *a larger volume* than that previously occupied by the intact portion which is now gone.

GJ: *So...what's going down? Is there any debris falling?*

JW: I don't see anything that's really falling there.

GJ: You don't see any debris falling from the building?

JW: I see a round snowball. I call this a snowball.

GJ: Okay, so there's no debris falling in that picture.

JW: I didn't say no debris.

GJ: *How much debris? What debris is falling in that picture?*

JW: I see some... I don't have a magnifying glass. Sorry!

GJ: Oh, it's that small you can't tell what's falling from the picture?

JW: Below this point here (points to bottom of the snowball). I don't really see much difference. It looks like the building is in good health. There's a little bit of cloud of haze there, but... I don't see any major material and the building is still completely intact from this point down, at that moment, below the snowball.

GJ: So you really don't see any falling debris there?

JW: Are you asking these questions for sincere, honest purposes?

GJ: I really am. This is sincere. I see falling debris in that picture and I'm wondering, I just can't fathom why you don't see falling debris in that picture. It's hard for me to understand. Because maybe I don't understand what you're trying to say.

JW: I'm not saying there is absolutely no debris, because someone may have had some... pennies on their windowsill that fell out. They might be falling down. But it's not a significant volume of material. The snowball here is about... it's bigger than the width of the building, and about that same amount in height. So, it's a little bit wider so you can't say it's the density of the building.

Misleading Argument #13:

Judy Wood begins arguing, albeit in a very incoherent manner, that much of the debris from the collapsing tower necessarily 'shoots up' based upon the false premise that the volume of the dust cloud is too small to account for the missing part of the building. This argument is misleading because *skyscrapers are designed to be mostly empty space by volume*. When a skyscraper fully collapses, like WTC7, the **debris is contained in a small pile many times smaller than its pre-collapse height.** It is false to assume that during the collapse the debris is *necessarily* less dense than the original skyscraper. The manner in which the Twin Towers collapsed caused significant amounts of debris to eject laterally causing the debris cloud to occupy a larger volume than occupied by the initially intact portion of the WTC tower.

GJ: *No, you can't say it's the density of the building.*

JW: It's less dense, so we're missing two thirds of the building already...

GJ: Yes.

JW: ... where did it go?

GJ: I don't know—I saw it go down, but maybe I don't remember seeing the videos right or something.

JW: I don't see it below that point.

GJ: That's because this is a picture shot before the whole building collapsed. It's during the collapse.

JW: Collapse? ...If it was a collapse I would expect to see the material piled up. If it was literally a collapse, this is about two thirds of the building. How compact might that be...?

GJ: Remember the ratio of the building is 200 meters wide by 130 meters tall.³⁹ OK.

JW: Correct. But you have this perspective of depth in the picture. I'm just going by this is a 40 story building, and its bottom is below the picture. That's 40 stories... so 110 is up to here. So between here and here you have a whole lot of building to account for. And it's 207 or 208 feet wide all the way up to that point, but it's still two-thirds of the height.

GJ: The width is two thirds of the height?

JW: *No. The amount that's missing is two thirds of the height.*

GJ: OK . All right.

JW: It's missing, and this snowball can't account for it all. Where'd it go?

GJ: Well, I'm not sure if that accounts for it all. I saw a lot of debris go down from that building, and based on that picture it seems plausible to me that most of the building is within that debris.

Audience: Isn't there a pyroclastic flow that happened?

JW: It hasn't got down to any point to flow anywhere yet... It's just...this material here is all that's left, except for what's going up.

Audience: So is the pyroclastic flow included in the debris moving out?

JW: I wouldn't really call this a pyroclastic flow. I would call this explosions. This part of the building is being exploded out.

Audience: You were both disagreeing on the amount of debris, how far it went away. I just wondered if you include that in the debris moving away from the towers?

JW: I'm saying there's not much building left. I'm not saying exactly what radius it goes to. You have inch deep dust a mile or two away. Do you count that? It gets spread all over the place. But what I see in this picture is we don't have much building left, and it has yet to hit the ground.

<u>Comment:</u> It depends upon how you define your distribution, so yes, you can define a radius and decide whether you need to include the dust scattered a mile or two away. The vast majority of the building, however, fell well within an area defined by a radius 6 times its footprint.⁴⁰

GJ: *OK.* (Searches through papers)

JW: I'm glad you brought this. This is my favorite picture.

GJ: Excellent. I'm glad. Well, I guess that accounts for why you put it on your website. OK. So, for any kind of beam weapon to annihilate the steel or anything like that, you would have to pump in a certain amount of energy to do that.

JW: It depends on what wavelength you use.

GJ: *No. The energy doesn't depend on the wavelength.*

<u>Comment:</u> The energy required to vaporize steel does not depend upon the form of energy. The form of energy will lead to differing degrees of loss which will increase the minimum energy requirements, but the amount of energy required to vaporize steel remains the same.

JW: It does to the extent of how efficient that energy is with that material.

GJ: OK. All right, so if you pump in a laser to heat the building up...

JW: I Think how much energy it takes to heat a cup of coffee in my microwave, versus that same water on the stove. Different amounts of energy...

GJ: True. That's because we know that the microwave is exciting the resonant energy of the water to heat your coffee.

JW: *The heat is exciting the water too.*

GJ: Right, but it still takes the same amount of energy to heat that coffee no matter how much energy you lose.

<u>Comment:</u> It takes a specific, definable amount of energy to heat a cup of coffee. This amount of energy is completely independent from the amount of energy you lose. This is normally inherently understood in a conversation between scientists.

JW: But it's a lot less efficient.

GJ: Okay. If you assume that you don't lose any energy at all, and you vaporize steel, you can calculate what energy is involved in vaporizing steel. It doesn't matter how you do it.

JW: Yes, it does.

GJ: *No, that would only increase the number.*

JW: How about if you heat the water up by putting a resistance across it versus putting a fire next to it?

GJ: The minimum amount of energy to evaporate a wire, by fire, by electric current, by anything...

JW: We're not talking about evaporation. This is like, kind of, being silly. You started out talking about dustification, then you're talking about beam energy, negative energy, then it's about vaporization...

<u>Comment:</u> Straw man: Dr. Jenkins never talked about 'dustification' since it is a fictitious vacuous term.

GJ: This is not me, this is from your website. It's you saying these things.

JW: I'm taking about the data on my website. I'm not making calculations for how much it took for anything, as **I don't think we should get distracted with that...**

GJ: Conservation of energy is not a distraction.

JW: (holding up photo of South Tower) Is this pulverized?

GJ: I see falling debris there, now, maybe it's not, maybe that's a different picture of something else, I don't know.

JW: The building is pulverized, and you see when the story is over with at the end of the day, you don't have much building left, anywhere. The buildings are gone. Let's look at Building Six for example. You get these big holes with nothing in them. Where did the material go?

GJ: If you melted down all the steel in the...

JW: Where did it go?

GJ: If you melt down all the steel in that...

JW: You've changed the subject.

GJ: No, no, I'm not. I'm really not. If you bear with me you'll see that I'm not... in the top 110 floors of the building, if you melted down the steel into its footprint it would only be six feet tall. There'd be one slab, the cross sectional area of the building six feet tall...

JW: How about the concrete? How about the bookcases and so forth? It'd be more than six feet tall.

GJ: Not much. Not if you melted it all down. I'm just saying that is the amount of steel.

JW: *Is that what you're saying...*

GJ: Those buildings really were mostly empty space by volume, so you have to do some analysis...

JW: *Is dust denser than solid steel or is it less dense?*

GJ: Of course not. It's much less dense.

JW: Okay, so how much do we have?

GJ: How much of what should we have?

JW: (no reply)

GJ: Of steel? Or of concrete?

JW: *This is not productive. It's not educational.*

GJ: *It's educational for me.*

JW: What's the subject now? Is it steel, is it concrete, or is it dust?

G.J. You choose. Please.

JW: This is a game you're playing.

GJ: I'm really not playing a game. I'm just trying to figure out what it is you had on your website. I'm just asking questions regarding it.

JW: What is your question? Ask the question, and we stay on that subject, through the whole sentence. See if you can handle that.

GJ: The buildings collapsed in a larger area than their footprint. Would you agree with that statement or not?

JW: No.

Evasion #8:

Wood continues to evade the main question here: did the debris from the buildings fall in an area larger than their footprint in contrast to her analysis of the Kingdome. Instead of answering this question she debates the term "collapse":

Misleading Argument #14:

Dr. Wood boldly asserts that "The Towers did not collapse". She states that the use of such terminology is "false, deceptive, and misleading." One might agree only if the word was even slightly misused. The definition of a 'collapse' is given by the American Heritage English Dictionary, Third Edition as:

Collapse (n.) 1. The act of **falling down or inward**, as from a loss of supports 2. An abrupt failure of function, strength, or health

The WTC towers fell down from a sudden loss of its supports suffering an abrupt failure of function and strength. In the common vernacular, no mechanism need be specified in order to correctly utilize the word. The *collapse mechanism* is precisely the topic currently being debated both within the 9/11 Truth movement and with NIST.

Perhaps the reason why Judy Wood argues that the building did not "collapse" is because she argues that debris was sent into the 'upper atmosphere' during collapse. If the "anti-

collapse" hypothesis is proven false (which is easily shown), then it is necessarily proven true that the WTC towers did indeed collapse.

G.J: *No*?

JW: They did not collapse.

GJ: (Pause) How big was the debris field?

JW: We covered that already.

Evasion #9:

This topic was 'covered,' but Wood never provided an answer to it.

GJ: What was your answer? I didn't catch it.

Comment from audience: Couldn't there be an answer that they collapsed and were pulverized at the same time? Both things happened?

JW: That's very misleading. "Collapse".

GJ: Well, thank you, I really appreciate your time. Thank you very, very much for clarifying some of these issues. I certainly have learned a lot here. I think the people who will view this video will have learned a lot as well.

JW: To see how welcoming I am to questions? To playing games? Haha.

GJ: I don't think it was a game. It wasn't a game to me. So...but I do appreciate your time and your patience for answering my questions. Thank you.

JW: *Oh, you want that picture? Good.*

G.J: Sure.

JW: Please study it.

After the interview:

GJ: "I was just trying to see what kind of scientific basis this was in... and I think I found out." 42

End of Interview

¹ Arabesque, Scholars for 9/11 Truth and Justice Member and 9/11 Researcher:

http://www.911blogger.com/blog/877.

² Jim Fetzer interviews Judy Wood, Non-Random Thoughts on RBN Live, November 11, 2006. 34:37 and forward.

 $\frac{\text{http://www.checktheevidence.com/audio/911/Jim\%20Fetzer\%20\&\%20Prof\%20Judy\%20}{\text{Wood\%20on\%20RBN\%20Live\%20-}}$

%20WTC%20Destruction%2011%20Nov%202006.mp3

³ Greg Jenkins, *The Overwhelming Implausibility of Using Directed Energy Beams to Demolish the World Trade Center*, www.journalof911studies.com

⁴ Dr. Greg Jenkins Interviews Dr. Judy Wood, http://video.google.com. http://video.google.com/videoplay?docid=-558096240694803017

http://composite.about.com/library/glossary/m/bldef-m3454.htm

6 http://dc911truth.org/

⁷ Jenkins, *The Overwhelming Implausibility of DEW*

⁸ Joan Killough-Miller, <u>The 'Deep Mystery' of Melted Steel</u>, WPI Transformations, Spring 2002. Note the "melted steel" indicated in the title of this paper. See also: **FEMA Report**: <u>Appendix C</u> of the <u>WTC Building Performance Study</u>.

⁹ http://georgewashington.blogspot.com/2005/12/why-was-there-molten-metal-under.html

To Steven Jones, Why Indeed Did the World Trade Center Buildings Completely

Collapse? pages 1-2, 17. www.journalof911studies.com. See also:

An Open Letter to Dr. Steven Jones by James Bennett, with replies by Steven Jones (April 23, 2007) James Bennett and Steven Jones

11 Steven Jones, Revisiting 9/11/2001 -- Applying the Scientific Method, p77

¹² See next footnote. Watch clip "part 10".

¹³ <u>Project for a New American Citizen: Steven Jones Lecture in Austin Texas</u>, April 14, 2007. Video Links and partial transcript.

http://www.911blogger.com/node/7913. This strongly implicates that "cleanup" was at the very least not fully accountable for these observations.

14 Jones, Why Indeed Did the World Trade Center Buildings Completely Collapse?

¹⁵ Jenkins, <u>The Overwhelming Implausibility of DEW</u>, pages 5, 9. "If you take into account losses from scattering and absorption in the atmosphere, reflection by aluminum and steel in the building, and inefficiencies from storing this huge amount of energy and generating photons, then the power required swells to at least thousands of earths worth of power. The scenario becomes more bleak when considering beams of particles that have mass since the ionization energies required would add massive amounts of energy in conjunction with the aforementioned inefficiencies...The power required to evaporate the steel in one of the WTC towers is astronomically large. To get a feel for the huge size of this number, we will compare to the largest laser in the western hemisphere, the MIRACL laser... we would need 57 million MIRACL lasers of power!"

¹⁶ David Ray Griffin, <u>The Destruction of the World Trade Center: Why the Official Account Cannot Be True</u>. Authorized Version (with references & notes). http://911review.com/articles/griffin/nyc1.html#pulverization

¹⁷ Jim Hoffman, Missing Building Contents: Most Contents of the Towers Were Turned to Dust, http://911research.wtc7.net/wtc/evidence/contents.html; As a note, it is very

debatable if most the pulverizable material was strictly converted into 'dust' (between 1 and 100 microns) on average rather than gravel (greater than a millimeter). Although much dust certainly did exist, it is difficult to estimate if dust represented the majority of the pulverizable material in the buildings by weight.

¹⁸ Jenkins, *The Overwhelming Implausibility of DEW*, page 2.

¹⁹ Ibid. page 5. The Energy required is "over 5 times the total power output of the entire earth including all carbon combustion, nuclear power, wind power, hydroelectric power, etc. This is with no loss."

²⁰ The reflectivity of steel in the microwave spectrum is over 99.9%. For comparison, a very good bathroom mirror (usually made from a thin coating of aluminum on glass) is only about 93% reflective in the visible spectrum. The reason that people should not place metallic objects in the microwave is because the near perfect reflection can cause damage to the microwave source oscillator.

http://physics.ucr.edu/~wudka/Physics7/Notes_www/node6.html "There is a very important characteristic of a scientific theory or hypothesis which differentiates it from, for example, an act of faith: a theory must be 'falsifiable'. This means that there must be some experiment or possible discovery that could prove the theory untrue."

²² This is worth trying if you haven't already. However, only leave it in for a few seconds or you will begin to burn/melt the plastic substrate which may possibly contain toxic fumes.

²³ For instance, this effect is used in arc-welding (using energy in the form of plasma).

²⁴ Jenkins misspoke here: he should have said '...and the paper in the towel does not absorb microwaves.'

²⁵ This mechanism is simple. Water has an electric dipole moment. In the microwave spectral region, the water molecule tends to align with the electric field. Since the electric field is flipping up and down rapidly, the water will flip up and down at the same frequency. That is, the electromagnetic radiation will cause the water molecule to 'spin'. This causes localized movement of atoms in the vicinity of the water, which is synonymous with increasing the temperature. Thus, your food is heated up by jostling the water molecules.

²⁶ 'Some kind of energy' is much too vague for substantive discussion. Exciting an *element* (as opposed to molecules or solids) is generally understood by scientists to mean exciting the electrons to higher energy states associated with that element.

To excite electrons in an atom, the energy required depends upon the specific element as well as the particular electronic states associated with the element. However, scientists frequently speak in terms of 'scales' when speaking in general terms. For instance, the scale associated with the amount of energy in food is 'hundreds of calories'. The scale used when speaking about the energy required to excite electronic states in elements is 'an eV', electron volts. A single eV equals 3.9×10^{-20} calories.

Excitations in solids with a crystalline type substrate, where a regularly repeating lattice may be defined, is discussed in terms of the 'energy bands'. That is, all the electronic states from the singular elements which make up the lattice overlap and add up in such a way as to form continuous energy bands. Some electrons become mobile described by the

'conduction band' within metals and are (more or less) free to flow through out the solid. This is why current flows in metals like the copper wires in your house.

Excitation of phonons, or crystal lattice vibrations, is the only way to dissociate steel. This may be accomplished, for instance, by applying a current to steel, and the electrons in the conduction band scatter off of, say, imperfections in the crystalline structure causing phonon excitations. Similarly, electromagnetic radiation may be absorbed by conduction band electrons which can excite phonon modes in a similar manner. Once the vibrational modes of the lattice are excited to a large extent (synonymous with 'high' temperature), then the steel will dissociate. To dissociate steel in this manner will require at least the minimal amount of thermal energy required (>5 earths worth of power).

²⁸ Jenkins, *The Overwhelming Implausibility of DEW*, pages 1-2.

³¹ Jenkins, Introduction to and Interview with Dr. Judy Wood conducted at the National Press Club in Washington D.C. regarding the use of Directed Energy Beams in the Demolition of the World Trade Center Towers. www.journalof911studies.com

³² "A previously published study of the WTC dust noted: 'The environmental science community has been slow to understand that the acute health effects were attributable to a complex mixture of gases and particles and that the particles in greatest abundance (mass) in the dust were the unregulated supercoarse (>10-µm-diam) particles, not the fine (<2.5-\mum-diam) or coarse (2.5-10-\mumdiam) particles that are typically measured. http://pubs.acs.org/subscribe/journals/esthag/40/i22/html/111506feat ure_lioy.html]." Taken from: Steven Jones, Hard Evidence Repudiates the Hypothesis that Mini-Nukes Were Used on the WTC Towers. http://www.journalof911studies.com.

http://911scholars.org/Media/DEW/150_JudyWood_NIST_RFC6.pdf

- Introduction to and Interview with Dr. Judy Wood (Febuary 9, 2007) Greg **Jenkins**
- The Overwhelming Implausibility of DEW (February 2007) Gregory S. Jenkins
- "Scientific Critique of Judy Wood's Paper "The Star Wars Beam Weapon" (January 9, 2007) James Gourley

²⁹ Ibid.

³⁰ Ibid.

http://www.ehponline.org/members/2002/110p703-714lioy/lioy-full.html

³⁴ Jenkins, Introduction to and Interview with Dr. Judy Wood

³⁵ Ibid.

³⁶ In fact, the principle is also named Archimede's principle named after Archimedes of Syracuse who discovered this law around 250 BC.

37 In the interview Dr. Jenkins misspoke: he said 'meters' instead of 'feet'.

³⁸ Jenkins, *The Overwhelming Implausibility of DEW*

³⁹ Jenkins misspoke here in the interview: he used meters instead of feet and 130 instead of 1300 feet for the height of the WTC towers.

⁴⁰ Jenkins, *The Overwhelming Implausibility of DEW*

⁴¹ Judy Wood, NIST Request for Correction,

⁴² For more discussion of Directed Energy Weapons:

- Why the damage to WTC Bldgs. 3 and 6 does not support the beam weapon hypothesis and some correspondence with Dr. James Fetzer about it (Updated March 20, 2007) Tony Szamboti
- Greg Jenkins, *Jim Fetzer and his 'Lying Eyes'*, February 27, 2007. http://www.911blogger.com/node/6497