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**Report Number:** NIST NCSTAR 1A

**Page Number:** 40

**Paragraph/Sentence:** Last Paragraph (5<sup>th</sup> paragraph), 2<sup>nd</sup> sentence:  
“Assuming that the descent speed was approximately constant,...”

**Comment:**

This is clearly a fallacious statement and most likely a misstatement. I believe it was acknowledged as such in the August 26, 2008 NIST technical briefing

**Reason for Comment:**

Statement is clearly in error.

**Suggestion for Revision:**

No *a priori* assumption about velocity vs. time is warranted. It should be measured.

**Page Number:** 40

**Paragraph/Sentence:** Last Paragraph (5<sup>th</sup> paragraph), 2<sup>rd</sup> sentence:

“...the two quantities needed for the determinations were (1) a length that some feature of the building descended and (2) the time it took to fall that distance.”

**Comment:**

The procedure being described gives average acceleration, which is a meaningless quantity if the acceleration is not uniform over the measured interval.

**Reason for Comment:**

Only instantaneous acceleration is relevant to the dynamics of the situation. I have measured the velocity vs. time and found that (1) the acceleration is not uniform over the period the report is considering, and (2) there is a 2.5 second interval, with sudden onset, in which the acceleration is indistinguishable from free fall to the resolution of the video data.

**Suggestion for Revision:**

Measure the velocity vs. time for the duration of the visible portion of the collapse, as I have done (see [www.ae911truth.org/+freefall](http://www.ae911truth.org/+freefall)), and report the results of your measurements.

**Page Number:** 41

**Paragraph/Sentence:** 2<sup>nd</sup> paragraph/ 1<sup>st</sup> sentence: “The theoretical time for free fall...”

**Comment:**

The appropriate quantities to report are the velocity as a function of time and the measured acceleration over intervals where the slope of the velocity vs time graph is approximately constant.

**Reason for Comment:**

Measuring the time of fall is inappropriate. It is equivalent to a measurement of average acceleration rather than instantaneous acceleration.

**Suggestion for Revision:**

Measure the velocity vs. time and show the results as a table and a graph. Delineate the intervals during which acceleration is appropriately constant, and give the acceleration during those intervals.

**Page Number:** 41

**Paragraph/Sentence:** 3<sup>rd</sup> paragraph / 1<sup>st</sup> sentence

“Thus, the actual time for the upper 18 stories to collapse, based on video evidence, was approximately 40 percent longer than the computed free fall time”

**Comment:**

This is a highly misleading statement which should be removed and replaced with a factual, meaningful analysis of the instantaneous acceleration of the building throughout the visible portion of the collapse.

**Reason for Comment:**

This entire topic is discussed in the report in a manner which *appears* to be designed to obscure the fact that free fall for a significant time interval actually occurred. Free fall is inconsistent with NIST's modeling of the collapse of the building. Therefore the modeling of the building is flawed.

**Suggestion for Revision:**

Face the fact of free fall as evidence for explosive demolition. Reopen the investigation to include all the evidence that was categorically swept aside on the grounds that explosive demolition was ruled out. What is actually ruled out by this evidence is natural collapse.