

# About Project Due Diligence

Project Due Diligence is a coordinated effort by a team of engineers around the world to engage the profession in performing its due diligence regarding the official reports on the three catastrophic building failures that occurred on September 11, 2001.

As engineers, we have a legal responsibility to guard the public's safety. Given the magnitude of the building failures at the World Trade Center, which resulted in greater loss of life than any other building failure in history, it is our duty to understand the official reports and to call for further investigation if those reports are not satisfactory.

To facilitate this process of due diligence, we are giving our presentation to groups all over the world. At the conclusion of each presentation, we invite engineers to sign our petition and to join the effort to present this information to the entire engineering profession.

Learn more at:

[AE911Truth.org/Project-Due-Diligence](http://AE911Truth.org/Project-Due-Diligence)



Join us after the Friday program of the Forensic Engineering 8<sup>th</sup> Congress

## A Critique of the NIST WTC Building Failure Reports and the Progressive Collapse Theory



**Dr. Oswald Rendon-Herrero**

Member of the Technical Council on Forensic Engineering (1982 to present). Co-chair of the Forensic Engineering 2nd Congress.



**Roland Angle, CE**

Fifty-year civil engineer licensed in the State of California. Board member of the nonprofit organization Architects & Engineers for 9/11 Truth.

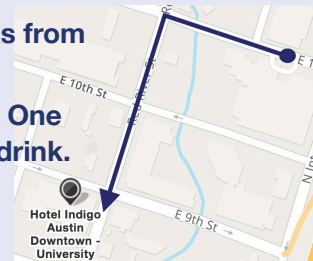
**Friday, November 30**

**5:30–7:30 PM** (networking till 6:00 PM)

**Hotel Indigo, 810 Red River St.**

Two short blocks from the Sheraton.

Free admission. One complimentary drink.



# PROJECT DUE DILIGENCE

*Engineers Engaged in Critical Examination of the WTC Reports*



# WTC Twin Towers



## NIST Says...

Exterior columns at WTC 1's south face and WTC 2's east face were pulled inward by sagging floor trusses heated by the fires, causing the exterior columns to buckle and initiate global collapse.

## Critical Scrutiny Shows...

- NIST's model could not produce an inward force to pull the exterior columns inward, so NIST imposed an artificial 5,000-lb. lateral load at each truss-to-column connection at each story in the impact zone.
- NIST simply assumes horizontal propagation after WTC 1's south face and WTC 2's east face allegedly failed, when in fact the other columns had enough reserve capacity to absorb the redistributed loads.
- NIST simply assumes, without providing any analysis, that global vertical collapse would ensue.
- Analysis by Zdeněk Bažant and Jia-Liang Le in the *Journal of Engineering Mechanics* purporting to prove vertical collapse relies on incorrect input values. With correct input values, their analysis shows the collapse would arrest after two seconds.

# WTC Building 7



## NIST Says...

Thermally expanding floor beams pushed a girder on Floor 13 off its seat, causing a cascade of floors. An adjoining column, laterally unsupported for eight floors, then buckled, triggering a total progressive collapse.

## Critical Scrutiny Shows...

- NIST omitted the stiffener plates at the end of the girder that would have prevented the girder flange from failing, thus preventing the girder walk-off.
- NIST ignored the presence of side plates welded to the column that would have trapped the end of the girder and prevented it from walking off its seat.
- NIST omitted the shear studs on the girder that would have caused it to act with the concrete slab, thus preventing its displacement and walk-off.
- NIST miscalculated the load of the Floor 13 girder falling onto the Floor 12 girder. The load would be insufficient to break the Floor 12 girder connection.
- NIST's model does not replicate the collapse and fails to explain the 2.25 seconds of free fall.

# Forensic Evidence



## NIST Failed to Account for...

...Two steel members—one from WTC 7 and one from WTC 1 or WTC 2—that experienced corrosion due to a combination of oxidation and sulfidation at 1,000°C, resulting in the formation of a liquid eutectic, as documented by FEMA. Experiments have ruled out sulfur from gypsum as the cause, leaving thermate as the only viable hypothesis.

...Dozens of eyewitness accounts of molten metal in the debris of all three buildings. NIST also attributed the orange molten metal seen pouring out of WTC 2 to molten aluminum from the airplane being mixed with organic materials, but experiments show that molten aluminum retains its silvery appearance when mixed with organic materials.

...More than 150 eyewitness accounts from 135 first responders and others who reported seeing, hearing, or feeling explosions prior to or during the collapses. When pressed on the many FDNY personnel who reported explosions, NIST said, "Taken as a whole, the interviews did not support the contention that explosives played a role in the collapse...."