

## **An Important note from the Principal Investigator Abolhassan ASTANEH-ASL, on the document that follows:**

Following document is a Progress Report submitted to National Science Foundation in September 2001 on my NSF funded WTC Project.

Some of the photos in this Progress Report, being the first photos released by this project were distributed by the National Science Foundation (Sponsor of my WTC Project) and University of California Berkeley, where I teach and do research and public service, in their newsletters. Some of the photos have been used incorrectly by some, who promote conspiracy theories, to indicate things that are totally false. The photos in this Progress Report do not show any sign of fire that may have happened before the collapse of the tower. If there are any sign of smoke or fire, my close-up investigation of these pieces indicated clearly and beyond any doubt that the steel pieces in these photos have been subjected to fire after the collapse and while were resting on the ground and exposed to Ground Zero fires that were going on for weeks.

I would like to add that in my entire work on WTC project and inspection of thousands of pieces of steel from the WTC structure, I never saw any piece of steel with any indication of being subjected to blast.

The facts about the photos in this Progress Report are as follows:

1. The photos in Figures 1, 2, and 4 are most likely showing steel from WTC 7. Other photos are most likely from the 110-story towers.
2. Photos in Figure 1 show the same steel beam. The beam is relatively minor member, most likely from a floor. Notice the duct openings on the beam web which is an indicator of it being a floor beam. Close inspection of the beam by this investigator (A. Astaneh-Asl) indicated that the distortion of the beam and fire effects and loss of some steel in this beam has occurred after the collapse. When this and other photos of this roll were shot, the beams on the truck, including this beam were still hot. As Figure 1 shows, in both photos is rising from the trucks and steel members. Scientifically, there is no possibility that the burning, melting and distortion of this beam could have happened when the beam was within the structure and carrying load prior to the 9/11 collapse. The reason is that if the beam was subjected to fire while in a building, as soon as the temperature of steel reached to about 500 degrees Celsius, much lower than the melting temperature of steel, the beam strength would drop to less than 50% of its original strength and the beam would collapse and would not have the chance to stay in its place and melt.
3. The beams in through 6 show sections with minor or no sign of fire exposure.

Respectfully,

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## World Trade Center Post-Disaster Reconnaissance and Perishable Structural Engineering Data Collection

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**With Cooperation of Dr. David McCallen of Lawrence Livermore National Laboratory**

**Objectives:** To conduct post-collapse reconnaissance investigation and to collect perishable data on World Trade Center Towers that collapsed and the buildings at the site that were damaged but not collapsed.

**Research Plans:** Dr. Astaneh, P.I. has traveled to New York City twice to conduct investigation of structure of WTC. Early investigation was done near Ground Zero as steel was being transported to recycling plants. Later investigations were conducted at the recycling plant where steel is being recycled. Some data on drawings and structures of WTC were obtained, and continues to be obtained from design offices of the structural firms who have designed the original structures. Photos taken during or immediately after the collapse have been purchased.



Fig. 1. A Beam from WTC-7 that is Burned



Fig. 2. A Column from Towers Appears to be hit with a Round and Fast Moving Object

**Findings To Date:** During the 1<sup>st</sup> ten days of stay, most of the investigation was on the structure of Building 7 of the WTC. The 47-story structure was burning for almost 7 hours before it collapsed, Figure 1(a). During the 2<sup>nd</sup> 10 days of his stay in NYC, Dr. Astaneh has been able to establish contact with one of the recycling plants in New Jersey recycling the majority of steel from the WTC. He has conducted more systematic part of his investigation there. He has been able to investigate and document a large number of steel structural members. Some of his most striking achievements have been to identify and save at least four members (columns and beams) from the WTC Towers that appear to be directly impacted by a plane or were in the area of intense fire and eventual collapse.

**Promise of Future and Long Term Research:** The continuation of this research will focus on building a realistic computer model of the structures of WTC and subjecting the structures to airplane impact and fire. This will be done using hardware and software of Lawrence Livermore National Laboratory capable of such high-powered analyses.

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