

October 14, 2013

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

This is one of the first abstracts of my NSF funded WTC project created on September 21, 2002.

Respectfully,

Abolhassan ASTANEH-ASL, Ph.D., P.E.

Professor and P.I. for the NSF Funded UC Berkeley WTC Project

Abstract

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

A Research Project Funded by the National Science Foundation

By **Abolhassan Astaneh-Asl**, Ph.D., P.E.,
Steel Structures

Professor and Principal Investigator
Department of Civil and Environmental Engineering

781 Davis Hall, University of California,
Berkeley, CA 94720-1710

Phone: (510) 642-4528, Fax: (510) 643-4528

Home office: (925) 946-0903

e-mail: Astaneh@ce.berkeley.edu, web: www.ce.berkeley.edu/~astaneh

On September 11, 2001, World Trade Center towers collapsed because of a terrorist attack. The twin 110-story buildings had tube steel structures steel and were the fifth and sixth tallest buildings in the world with a height of about 1365 feet. The tragic collapse due to this criminal act will require comprehensive analyses of the structure subjected to initial impact of airplane as well as the intense fire that followed. Such analyses no-doubt will be conducted in the future to establish the cause(s) of the collapse and failure sequence in order to improve design of new buildings and retrofit existing structures. The studies will need *reliable* data on mechanical properties of materials used in the towers, actual as-built steel connections and members as well as floor systems.

The objective of this small grant to conduct post-disaster reconnaissance is to collect perishable data and samples of material and structural members and connections that later can be used to establish their properties. Of particular interest is to collect samples of steel from areas that were heavily affected by heat of the jet fuel and/or impact of the planes. The Principal Investigator has been providing information to Federal authorities and will be able with the permission of those authorities, to take samples from the debris.