Abstract Submitted
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Analysis of the Collapse of the South Tower of the World Trade Center[1] CROCKETT GRABBE, University of Iowa & SeaLane Consulting — An analysis of the South Tower collapse is made by examining the earlier stages of the collapse, with careful consideration given to the conservation of energy and momentum in the top segment of the tower. This includes events such as the upward movement of the corner of that top segment on collapse initiation, at the same time that squibs appear below the segment. Information gained on the details of that development is used to calculate the minimum energy and power of the sources of that collapse initiation, and it is shown that the sources of that energy and power include 2 separate sets of conventional explosions inside the building just below the top segment. It is shown these explosive forces must produce the energy- and momentum-imparting moves of that top segment, and result in the white clouds that are seen to arise from pulverized concrete below the the floors where the plane impacted, and the subsequent gray clouds that result from pulverized concrete (part of it black carbon produced by the fires) of the top segment. The development of the gray clouds is shown to result from the rapid disintegration of this top segment near its interface with the floors below the impact.

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