

# Demolition of Stubbs Tower

Georgia, USA, December 2007

The dramatic and successful implosion of the 15-story Stubbs Tower occurred early in the morning on Saturday December 15, 2007. A ground-breaking event on many fronts, the defunct apartment complex was the second tallest building in Savannah, Georgia and the first to be explosively demolished. More importantly, however, is what happened leading up to demolition.

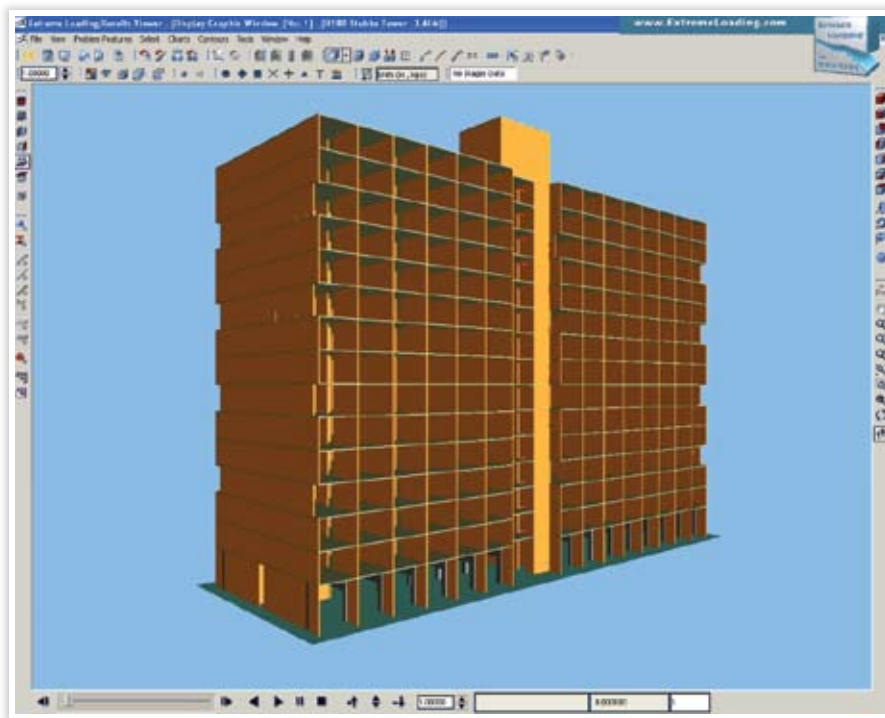
The modeling, prediction, and simulation of the project were part of an ongoing project being undertaken by Dr. Emmett Sumner of NC State University in cooperation with ASI in the use of Extreme Loading® for Structures (ELS) for the study of progressive collapse. While ASI has modeled numerous demolition projects, the analysis results are usually withheld from the general public until after the actual demolition. For various reasons, this was not going to be the case in Savannah.



The Stubbs Tower demolition simulation created using ELS helped D. H. Griffin, the general demolition contractor, and Demolition Dynamics, the explosives demolition expert, win the final approval from the city to perform the explosives demolition.

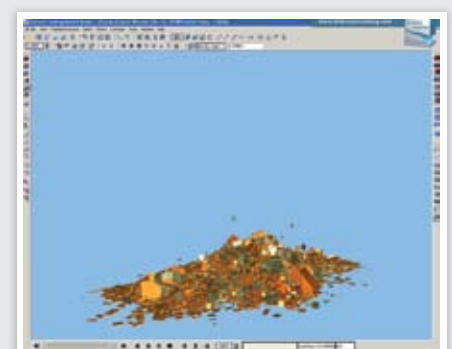
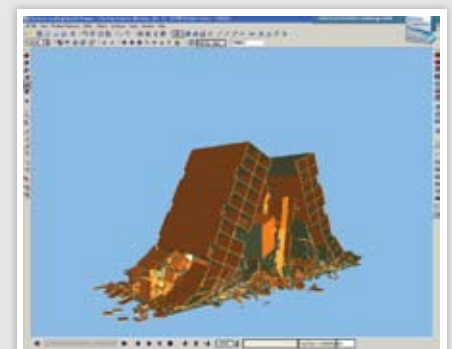
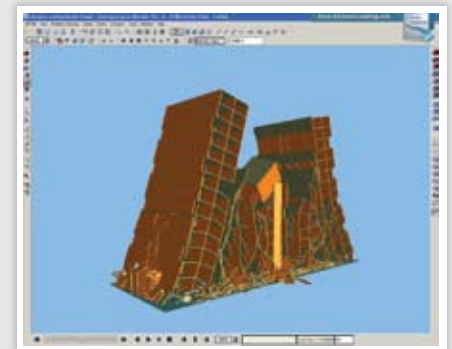
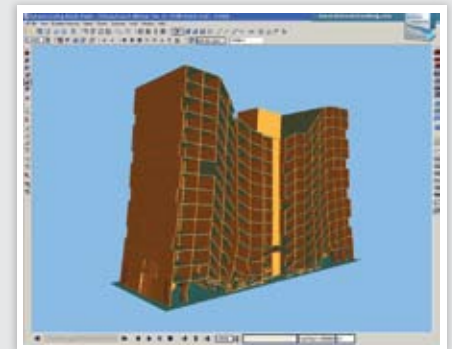
The demolition simulation was then released two days prior to the actual event, shown on the local news, and hosted on numerous media websites. The release of the demolition simulation pre-occurrence demonstrated both the confidence in ELS predictive capabilities and the positive attention that can be generated.

The video simulation created using ELS also served to allay the justified concerns of neighbors and approving regulatory boards. "It went off exactly as we were told it would happen, and as the computer model simulation showed it would," exclaimed Earline W. Davis, the Executive Director of Savannah's Housing Authority.



This event demonstrated the positive advances that can be achieved through cooperation between the ASI team of engineers and software developers, and both the academic community and demolition contractors.

The analysis of all of the research data compiled as a result of the simulation and demolition is currently being used by our engineers to further enhance the capabilities of the ELS program.



Demolition Sequence

**Headquarters**  
3221 Wellington Court  
Raleigh, NC 27615, USA

**Tel:** (919) 645-4090  
**Fax:** (919) 645-4085  
**Email:** [sales@appliedscienceint.com](mailto:sales@appliedscienceint.com)

[www.appliedscienceint.com](http://www.appliedscienceint.com)  
[www.extremeloading.com](http://www.extremeloading.com)

**Middle East**  
103 El-Alameen Street, Mohandeseen,  
Giza 12411, Egypt

**Tel:** (202) 3303-5072 or (202) 3346-1758  
**Fax:** (202) 3346-1758 **Ext.** 111  
**Email:** [cairo@appliedscienceint.com](mailto:cairo@appliedscienceint.com)