

conducted to understand how well they withstand such mechanical damage and to determine whether it is appropriate and feasible to improve their resistance to such damage.

- In the past, tall buildings have occasionally been damaged, typically by earthquakes, and experienced collapse within the damaged zones. Those structures were able to arrest collapse before they progressed to a state of total collapse. The two WTC towers were able to arrest collapse from the impact damage, but not from the resulting fires when combined with the impact effects of the aircraft attacks. Studies should be conducted to determine, given the great size and weight of the two towers, whether there are feasible design and construction features that would permit such buildings to arrest or limit a collapse, once it began.

2.5 References

- BBC News. 2001. "We Ran for Our Lives." Account of Mike Shillaker. September 13.
- Cauchon, D. 2001a. "For Many on Sept. 11, Survival Was No Accident," *USAToday.com*. December 19.
- Cauchon, D. 2001b. "Four Survived by Ignoring Words of Advice," *USAToday.com*. December 19.
- Computers and Structures, Inc. (CSI). 2000. *SAP-2000*. Berkeley, CA.
- Dateline NBC. 2001. "The Miracle of Ladder Company 6." September 28.
- Hearst, D. 2001. "Attack on America: Survivors: Suddenly they started to yell out, 'get out now': Bravery and fear mingled with disbelief," *Guardian Home Pages*, page 15. Account of Simon Oliver. September 13.
- Labriola, J. 2001. Personal account. Channel 4 News, "Inside the World Trade Center," broadcast. September 13.
- Masetti, A. 2001. Personal account received by email. December 21.
- Mayblum, A. 2001. Personal account. www.worldtradecenternews.org/survivorstory.html, World Trade Center Miracles section. September 18.
- New York Board of Fire Underwriters. 1975. *One World Trade Center Fire, February 13, 1975*.
- Nicholson, W. J.; Rohl, A. N.; Wesiman, I.; and Seltkoff, I.J. 1980. *Environmental Asbestos Concentrations in the United States*, page 823. Environmental Sciences Laboratory, Mount Zion Hospital, New York, NY.
- Scripps, H. 2001. "I walked out ... I made it out alive," *BostonHerald.com*. Account of John Walsh. September 14.
- Shark, G., and McIntyre, S. December 5, 2001. ABS. Personal account.
- Smith, D. 2002. *Report from Ground Zero*. Viking Penguin, New York. p. 29.
- Zalosh, R. G. 1995. "Explosion Protection," *SFPE Handbook of Fire Protection Engineering*, 2nd edition. Quincy, MA.