

people down the stairs just prior to the collapse of the building. It is unknown how many of this group survived.

- Some mobility-impaired occupants requiring assistance to evacuate were left by coworkers, thereby imposing on strangers for assistance.

7.1.6 Evacuation of WTC 2

The evacuation from WTC 2 was markedly different from that from WTC 1. Over 90 percent of the occupants had started to self-evacuate before the second aircraft struck, and three-quarters of those from above the 78th floor had descended below the impact region prior to the second attack. (Nearly 3,000 occupants were able to survive due to self-evacuation and the use of the still-functioning elevators.) As a result, 91 percent of all the occupants survived. Eleven people from below the impact floors perished, about 0.1 percent. Eighteen people in or above the impact zone when the plane struck are known to have found the one passable stairway and escaped. It is not known how many others from the impact floors or above found their way to the passable stairway and did not make it out or how many could have been saved had the building not collapsed. A delayed or avoided collapse could have provided the additional time for more people to learn about and use the passable stairway.

The general pattern of the evacuation was described in Chapter 3. The following are specific facts derived from the interviews:

- The median time to initiate evacuation was 6 min, somewhat longer than in WTC 1.
- As in WTC 1, occupants observed various types of impact indicators throughout the building, including wall, partition, and ceiling damage and fire and smoke conditions (Figure 7–4).
- Building announcements were cited by many as a constraint to their evacuation, principally due to the 9:00 a.m. announcement instructing occupants to return to their work spaces. Crowdedness in the stairways, lack of instructions and information, as well as injured or disabled evacuees in the stairwells were the most frequently reported obstacles to evacuation.
- Evacuation rates from WTC 2 showed three distinct phases:
 - (1) Before WTC 2 was attacked, occupants used elevators, as well as stairs, to evacuate, resulting in approximately 40 percent of the eventual survivors leaving the building during that 16 min window.
 - (2) After WTC 2 was attacked and the elevators were no longer operational, the evacuation rate slowed down to a steady rate equivalent to the rate observed in WTC 1, which also had only stairs available to occupants.
 - (3) About 20 min prior to building collapse, the rate in WTC 2 slowed to approximately 20 percent of the stairwell-only evacuation rate.