

Fire Investigation Summary

Seattle, WA

**Fire Fighter Fatalities
January 5, 1995**

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**National Fire
Protection Association**

A fire in a Seattle warehouse on January 5, 1995, resulted in the deaths of four members of the Seattle Fire Department. All four died when the floor between the upper and lower levels of the building collapsed. The fire, which was determined to have been set intentionally, began in the building's lower level directly below the area in which fire crews were conducting interior fire operations.

The building in which the fire occurred was originally constructed in 1909 with a structural support system of heavy timber. Over the years, however, the warehouse had been modified a number of times. One of these modifications was a cripple wall¹ constructed of material estimated to be 2 inches by 4 inches in dimension, that had been installed to support the joists of the floor assembly between the upper and lower levels.

Unfortunately, this cripple wall was more susceptible to fire than the building's other structural support mechanisms and when it failed it caused the floor to fail, creating the opening into which the four fire fighters fell.

As a result of NFPA's on-site investigation, which began the day after the collapse, and subsequent interviews, the following were identified as contributing factors in this incident:

- Confusion about the physical layout of the building, as well as the location of crews working in, above, and around the structure in relation to the fire.

- Lack of awareness on the fireground of the location of the fire and the various crews in relation to the fire.

- Insufficient progress reports transmitted over the fireground frequency.

- Lack of awareness of the length of time the building had been on fire and the passage of time after fire department notification.

- Failure to take into account the fact that the building was a known arson target when formulating the fireground strategy.

- Insufficient information to develop a risk/benefit evaluation of fireground operations.

Over the past six years, the Seattle Fire Department has aggressively sought to enhance firefighter safety by instituting a personnel accountability system that has become the model for

many other fire departments around the country, by equipping personnel with protective equipment that meets current standards and portable radios that allow them to transmit an automatic, coded distress call to the dispatch center. Despite these precautions, four fire fighters lost their lives. As this incident so tragically illustrates, a great many dangers must still be accounted for during fire fighting operations.

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The National Fire Protection Association's Fire Investigations Department documents some of the most significant fires and incidents throughout the world. The objective of these investigations, and the subsequent reports that are prepared, is to determine what lessons can be learned from these incidents. This information is then made available to the fire safety community to be used in developing future codes and standards and to modify fire ground operations.

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