

HOTEL FIRE
Boston, MA
August 30, 1989



FIRE INVESTIGATIONS

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Summary Investigation Report

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INTRODUCTION

On August 30, 1989 at approximately 5:15 a.m., a fire occurred in a guest room at the Sheraton Boston Hotel. The entire building is equipped with smoke detectors in corridors and guest rooms and with occupant evacuation alarms. The hotel has two high rise towers that contain guest rooms. One tower is fully sprinklered, and the other tower, where the fire occurred, was scheduled for the installation of sprinklers.

Boston fire investigators have determined that the fire was suspicious in nature and the ignition likely involved a king-size bed. After ignition, the smoke detector in the room of origin activated, and guests in adjacent rooms notified the hotel operator. The hotel operator immediately called the Boston Fire Department and initiated the hotel's fire emergency plan.

Several employees who were members of the hotel's incipient fire brigade responded to the floor of fire origin, found smoke coming from the guest room, and called the operator to confirm the fire. Shortly after the fire brigade reached the room, Boston fire fighters also arrived and began their fire attack with their hose which was connected to a standpipe. The fire was extinguished while it still involved the king-size bed. Though the room of fire origin was heavily damaged by flames, heat, and smoke, very little damage occurred outside this room.

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BACKGROUND

The Sheraton Boston is a modern hotel complex that contains guest rooms, conference rooms, offices and restaurants. The conference rooms, offices, restaurants and lounges are in a three-story structure that connects the two high rise towers which contain the guest rooms.

The north tower was constructed in 1964 and has an average of 48 guest rooms on each of its 29 floors. This tower is completely protected with a sprinkler system.

The fire occurred in the south tower. This tower is a concrete structure and was built in 1976. It is 29 stories high and contains an average of 30 guest rooms on each floor.

The walls between guest rooms and between guest rooms and the corridors have two layers of fire rated gypsum wallboard attached to each side of the metal studs and the walls run slab-to-slab. Each of the guest rooms have solid-core doors equipped with closers.

The hotel complex has been provided with many fire protection features in addition to the sprinkler system. The south tower has smoke detectors, heat detectors, and manual pull stations in the corridors, and all of these devices are connected to an annunciator panel which is monitored 24-hours a day. The activation of detectors will initiate a silent alarm at the panel and after a specified time, automatically initiate an evacuation alarm on the floor of fire origin, on the floor above and on the floor below. Activation of any manual pull station will immediately initiate a full alarm on those floors, will indicate at the annunciator panel which zone was activated and will send a signal to the Boston Fire Department. Each guest room has a single-station, hard-wire powered smoke detector that is not connected to the annunciator panel.

Other fire protection features in the south tower include standpipes in the exit stairways and fire extinguishers in the corridors. A project to retrofit this tower with a sprinkler system began on September 15th, only two weeks after the fire occurred.

In addition to the fire protection equipment and construction, this facility has a trained and equipped incipient fire brigade. All security and engineering personnel are trained to suppress fires in the incipient stages. At anytime of the day or night, four or more of the trained staff are on duty. The hotel has a "fire cart" which contains a fire retardant blanket, axe, insulated gloves, rope, three fire extinguishers and sand and is intended to be used by the trained personnel.

FIRE INCIDENT

On the morning of August 30, 1989 an unknown person or persons apparently entered Room 2359 (south tower) of the Sheraton Boston and did not damage the door to do so. Boston arson investigators believe this (these) individual(s) may have placed ordinary combustible materials under the bed, ignited the materials, and left the room without being noticed.

Shortly before 5:15 a.m., two guests (one in a room adjacent to the room of fire origin and one in the room directly above the room of fire origin) called the hotel operator at about the same time to report that they could hear a smoke detector operating. In response to these calls, the operator notified the Boston Fire Department, dispatched the hotel fire brigade, and began to alert the managers who lived in the hotel.

When the first staff member arrived on the 23rd floor, he found light smoke seeping out of the space near the door jam and the top of the door. He activated the manual pull station closest to the room. Once other staff members arrived with the fire cart, they opened the door to the room and found heavy smoke so they closed it immediately.

About the same time, Boston fire fighters arrived on the 23rd floor and came down the corridor. Having connected their hose line to one of the standpipes, they entered the room and quickly knocked down the fire. The fire fighters also broke out the windows in the room and had the fire completely extinguished in about 15 minutes. Fire fighters also forcibly entered several rooms to check for fire extension and possible victims. Their efforts revealed that the fire had been contained to the room of origin and that no guests were in any of the rooms.

As a precaution, guests on three floors of the hotel were evacuated without injury. All guests were allowed to return to their rooms approximately one hour after the fire had been extinguished.

Post-fire inspection of the room revealed that the fire had heavily damaged the room of fire origin. Flame damage was limited to the rug under the bed, the bed and the wall adjacent to the bed. Flames reportedly consumed most of the mattress, but did not extend to the nightstand next to the bed or to other furnishings such as an upholstered chair. The vinyl wall covering began to bubble and peel on the upper areas of the walls which were not adjacent to the bed. It was not possible to confirm damage to the wall adjacent to the bed because the damaged gypsum wallboard had been removed.

Damage outside the room of fire origin was limited. Some smoke odor was reportedly detectable in the room above the fire and smoke which escaped during the fire attack left stains and an odor in the corridor on the 23rd

floor. Several doors and one wall were damaged by fire fighters when they forcibly entered rooms.

SUMMARY

The suspicious fire in Room 2359 of the Sheraton Boston had the potential of risking the safety of hotel guests and causing serious damage to the facility. However, the firesafety features of the complex, the actions of the staff, and the quick response of Boston fire fighters prevented a more severe fire.

Though not connected to an annunciator panel, the smoke detectors in the room of fire origin did provide early warning to guests in other rooms, and the guests in turn notified the hotel operators. The hotel operators responded as trained by immediately calling the fire department, the fire brigade and others. While the fire suppression personnel were responding, the fire resistive construction of the building contained the fire to the room of origin. Ultimately, the active response of hotel staff and the Boston Fire Department in conjunction with the passive fire protection features in this facility resulted in no injuries or fatalities and only minimal interruption of hotel operations.