

FATAL HOTEL FIRE

New Orleans

LAURENCE D. WATROUS

Supervisor, NFPA Fire Record Department

MODERN HIGH-RISE MOTOR HOTELS are becoming very popular, and their convenience and attractiveness draw travelers. However, few guests examine fire protection and exit facilities before they check in. After travelers have registered they are taken to their rooms by way of the elevator. Throughout their stay the elevator becomes a familiar exit and serves as the only path to the outside.

On July 23, 1971, in New Orleans, Louisiana, six people died when fire erupted in a twelfth-story room of such a building. Five of the victims were trying to escape from the motor hotel by using an elevator from the fifteenth floor. When the elevator reached the twelfth floor it stopped and the doors opened. Five of the six passengers died from the heat and smoke in the twelfth-story corridor. The sixth victim was a guard who also died in the twelfth-story corridor.

THE BUILDING

THIS MODERN MOTOR HOTEL, located in the heart of downtown New Orleans, opened for business in 1968. The building measures 231 feet long and 114 feet wide on the first seven floors, above which the width changes to 67 feet for ten floors. The building extends to a total height of 17 stories (the top story is called the eighteenth, as there is no thirteenth story). The roof area of the seventh story has a swimming pool with patio.

The first story contains the motor hotel lobby, a restaurant, an automobile dealer, several offices, and the ramp for the parking garage. The second through the seventh levels are reserved for open-air parking. The remaining ten stories contain 30 rooms each — in all, 300

The author is deeply indebted to the New Orleans Fire Department and to officials for their cooperation while he was obtaining information for this article. All the photos are used by courtesy of the New Orleans Fire Department.



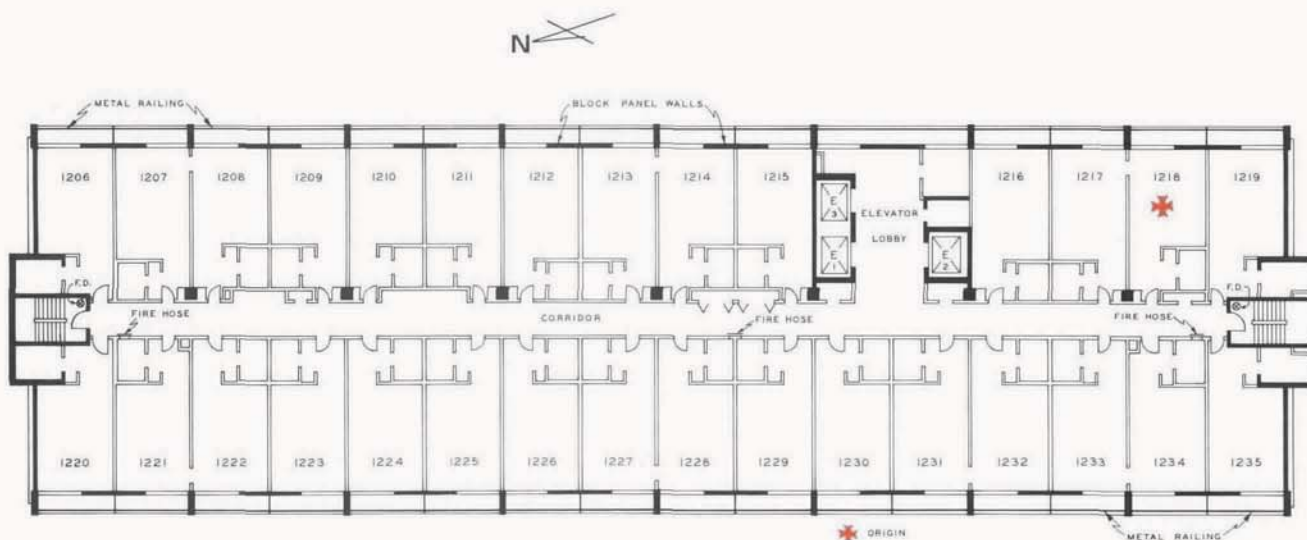
NFPA pressure-sensitive warning decal, G-7

rooms. On the night of the fire 251 of the rooms were occupied by 408 guests.

The fire-resistive structure is of poured-in-place reinforced-concrete-pan construction, supported on concrete columns. The thinnest part of the floor structure is three inches thick. The exterior walls on the first floor are of masonry construction with a brick veneer. Metal gratings and decorative railings enclose the parking garage area. From the eighth to the seventeenth floor, sliding glass doors opening to small railed-in balconies and a masonry-block panel wall between the exterior concrete columns form the two long exterior walls. Both ends of the building are of solid masonry construction.

The eighth through the seventeenth stories are arranged with the rooms off a long central corridor. The elevator lobby, with access to the three passenger elevators, is located about one-third of the way from the east end of the building. There are two enclosed stair towers, one at each end of the central corridor. Class B fire doors give access to the stair towers.

Each floor has two manual pull stations and two horns for the local evacuation alarm. Each station operates all the horns throughout the building. A 500-gpm electric-drive fire pump supplies the building's three eight-inch wet standpipes. A fire department sia-



Floor plan of the twelfth floor. The fire, which was reported to the Fire Department by the occupants of Room 1214, originated in Room 1218. Five of the six victims occupied rooms on the fifteenth floor. They lost their lives when the elevator they were using as a means of escape stopped at the twelfth floor.



The room directly over the room of origin. Layout, furnishings, and decor are the same.

The room of origin received heavy damage. Here the bedsprings can be seen in the foreground.



mese is located at ground level at each end of the building. On each floor there are three hose cabinets equipped with 1½-inch hose besides a gated 2½-inch outlet for Fire Department use. There is also a 2½-inch gated outlet at each floor level in each of the stair towers.

The interior partitions between the corridor and the rooms consist of one thickness of ½-inch gypsum-board on each side of steel studs. The partitions between the rooms are constructed with a single thickness of ½-inch gypsumboard on one side of the steel studs, and two thicknesses on the other. The doors to and between the rooms are of solid-core wood set in metal frames.

Throughout the corridors and rooms the floors are covered with a rubber pad and a carpet. The walls in the corridors have a vinyl wall covering. A similar wall covering is used in the rooms, except that in many rooms the wall behind the bed is covered with wood paneling. The suspended ceiling in the rooms is sprayed with a noncombustible finish, while the elevator lobby and corridor ceilings are of noncombustible tile supported in metal strips.

The room furnishings consist of a bed, a chair, a small table, and a dresser, all of wood construction. Each room has an air-conditioning unit built into the exterior wall adjacent to the sliding glass doors.

THE FIRE

ABOUT 2 am on July 23 the motor hotel management had a disagreement with the occupants of Room 1218 over one of the establishment's rules. As a result the occupants of that room checked out and left the building. Some time later twelfth-floor occupants noticed the

odor of smoke and reported it to the front desk.

Reportedly a search was made, and it was determined that the fire was in Room 1218. One of the building guards broke open the door to that room, while the other guard started evacuating guests on the twelfth floor. Neither guard had brought a charged hose or extinguisher to the room before opening the door. After the guard who had been searching the twelfth floor had evacuated two elevator loads of people, smoke and heat forced him to leave the floor without rescuing any other people. He was unable to find the other guard before he left.

At 5:26 am the occupants of Room 1214 called the Fire Department directly and reported the fire. Shortly thereafter the Fire Department received other calls and a street fire alarm box signal.

Responding fire fighters could see flames roaring from the twelfth story, and they promptly called for the team of highly trained men called the Flying Squad to augment first-alarm manpower. At 5:35 a full second-alarm assignment was called, because there were many people on the balconies waiting for rescue.

The shape of the building and limited access to the east side of the building prevented effective use of aerial ladders. One truck company parked at the end of the building and a ladder pipe was set up. The aerial had to be extended fully to discharge water on the fire. The stream was directed against the far wall of Room 1218 through the opening where the sliding glass doors had been. The ladder pipe was operated for about ten minutes, until water had blackened the area.

Inside, fire fighters were having trouble reaching the fire. One of the three elevators was operating very slowly, one was going up and down between two upper floors, and the third appeared to be stuck at the twelfth story. Some of the fire fighters started walking up the stair towers with their equipment, while others waited for the elevators to come to the lobby.

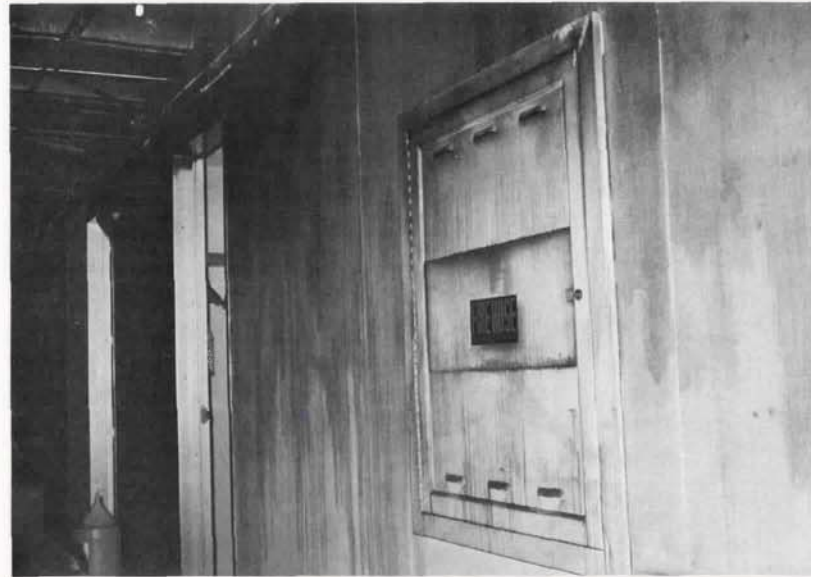
When the men in the stair towers reach the fire floor they found the doors from the towers to the corridors locked. The fire fighters who rode the elevator to the eleventh floor readily opened the doors to the stair towers on the eleventh floor, because the doors were locked only from the stair tower side.

Several fire fighters attempted to take the elevator directly to the fire floor from the eleventh floor. When the car reached the fire floor and the doors opened, a wall of heat and smoke forced the men to dive for the floor of the car. Fortunately, after a short time the doors closed and the elevator proceeded upward. At the upper floors people got on the elevator with the fire fighters. Although the car did not stop at the fire floor, several of the passengers had to be given oxygen because of the smoky conditions inside.



Each room has an air conditioner built into the masonry-block wall, as shown here. The doorway to the railed-in balcony is at the left.

This hose cabinet, located about 150 feet from the room of origin in the twelfth story, was not used. The degree of smoke damage is obvious.



One-and-a-half-inch hose that had been carried to the eleventh floor was connected to the standpipe and advanced up the stair tower nearer the fire to the fire floor. After the door had been cooled and the small glass window in the door had been broken, the door was opened from the inside, allowing the fire fighters access to the fire floor. The hand line was then advanced down the corridor and into Room 1218, where most of the fire had been knocked down by water from the ladder pipe. The hand line was used to cool hot spots and extinguish small fires in the corridor involving the doors, the wall covering, and the carpet. While the fire fighters were working in this area they found the body of the guard who had opened the door to the room of origin.

Other men who had come up the opposite stair tower also gained access to the floor by breaking the small glass window. In the corridor, near the elevator

lobby, they found the bodies of a doctor, his wife, and their two small children. A woman was found, her body partially in the elevator, along with her son. Fire fighters moved her into the elevator and closed the door. When the car reached the ground floor both the woman and her son were taken to the hospital, where she died. Rescue and emergency treatment at the scene by the Fire Department saved her son.

The Fire Department made no estimate of the number of people rescued. A considerable number were taken down the stair towers and given oxygen by a rescue squad located in front of the building. In all, four alarms were sounded, mostly for manpower to evacuate the building. Twelve engines and four trucks with about 90 men were involved in rescue and fire-fighting. At 6:02 am, about 35 minutes after the Fire Department had been notified, the fire was declared out.

Damage was confined to the twelfth story (only a small amount of smoke ever reached the upper stories), with heavy damage to the room of origin and heat and smoke damage extending throughout most of the twelfth-story corridor. The solid-core wood doors had held most of the heat and smoke out of the various rooms. Six people were dead. Many others required first aid for smoke inhalation. The loss was estimated at \$150,000.

Fire officials believed the fire was of incendiary origin. The two men who had left the motor hotel after the argument with the management were promptly picked up, but after investigation officials found that they were not responsible for the fire. At present the person who started the fire is not definitely known.

The man rescued from the elevator indicated that he and his mother and the doctor and his family had entered the elevator at the fifteenth floor. When the elevator reached the twelfth floor the doors opened and heat and smoke poured into the car. The doctor and his family left the elevator and started down the smoke-filled corridor toward the stair tower. The survivor's mother collapsed as she started to leave the car, blocking the door. The survivor himself was overcome by smoke and collapsed inside the car.

This fire dramatically points out that a fire-resistive building is not necessarily a fire-safe building. Had the guard not opened the door to Room 1218, thereby allowing fire gases to contaminate the corridor, and had he instead operated the alarm, notified the Fire Department, and started evacuating people, he and the five others who died would probably be alive today. In a building of this design fire fighters could have confined the fire to the room of origin if the door had not been opened and they had been notified promptly. The delay in reporting the fire was an obvious error on the part of the motor hotel management.

The doctor and his family had been staying in Room 1520, which was adjacent to a stair tower on the fifteenth floor. Their door to the corridor was inches from the door to the stair tower. Had they turned left and stepped through that doorway, instead of walking 135 feet to the elevator lobby, they would have been able to walk to the ground floor safely. The same is true for the mother and her son. They walked approximately 100 feet to the elevator, instead of 35 feet to the stair tower. During fire-fighting, with the twelfth-floor doors to the stair towers opened, the stairs remained usable.

Several recent articles treating evacuation in high-rise buildings have stated that total evacuation is not generally necessary or practical. Control of elevators, selective evacuation, and "safe areas" are recommended. None of the articles advocates use of elevator systems for mass evacuation. Elevators are not designed as a safe means of evacuation during fire conditions.

There have also been several recent articles in *FIRE JOURNAL* concerning fires of incendiary origin in hotels and similar occupancies — 28 victims in Tucson, 20 in Seattle, 19 in Los Angeles,¹ and now six in New Orleans. It should be obvious that there is a need for automatic protection to lessen the effects of incendiary — and all other — fires. An automatic detection system will eliminate the human factor from the search for the fire and will give the alarm to the building occupants and to the fire department; an automatic suppression system, in addition, will control the fire until fire fighters arrive.

Perhaps building designers are becoming aware of the dangers of fire. A recent article in *Engineering News Record* discussed the fire protection for a high-rise building in San Francisco.² The facilities will include a sprinkler system, smoke-venting air-conditioning systems, communications gear for the fire fighters, and a public address system to notify and advise building occupants — all steps in the right direction. The cost of these facilities is small compared to the value of the building. These few features should be minimum regulations for all new tall buildings.

As a result of this fire the New Orleans Fire Department now requires all hotels to inspect and secure rooms of checking-out guests before they are allowed to pay their bill and leave the hotel. △

¹ See Laurence D. Watrous, "The Third in a Series of Many? 28 Die in Pioneer Hotel, Tucson, Arizona," *FIRE JOURNAL*, Vol. 65, No. 3 (May 1971), p. 20, and Laurence D. Watrous, "Two Fatal Hotel Fires," *FIRE JOURNAL*, Vol. 65, No. 1 (January 1971), p. 33.

² "Another Skyscraper Gets Firesafety Design," *Engineering News Record*, Vol. 187, No. 9 (August 26, 1971), p. 15.