A fire occurred in the early morning hours of November 14, 1977, in the Filipinas Hotel in downtown Manila, Philippines. The confirmed death toll, as of this writing (December 1, 1977), was 47. The fire took place during Typhoon Unding, with heavy rain and gusty winds of 47 kilometers per hour (29 mph). The wind helped spread the fire rapidly over the hotel's combustible interior finish. Several persons jumped from windows to the

Mr. Carson is president of Carson Associates, Inc., a fire protection consulting firm based in Springfield, Virginia. He conducted a fact-finding mission on this fire for the NFPA. Because he was never granted permission by local authorities to enter the building, Mr. Carson pieced together the story of the fire and details of the building from newspaper stories, a block plan of the area given him by the Philippine Insurance Rating Association, and interviews with fire officers, hotel employees, and people who witnessed the fire. Therefore, certain information in this report is qualified. The cooperation of the following individuals is gratefully acknowledged: Chief Fire Marshal Fortunato Dejors, Metro Manila, Philippines, and Amableto L. Bandrill, NFPA member and President of the Fire Protection Equipment Distributors and Manufacturers Assoc. of the Philippines, Inc. The assistance of the US Embassy in Manila is also gratefully acknowledged.

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roofs of nearby buildings, while at least five others jumped to the ground and died. A total of 141 people was registered in the hotel at the time of the fire.

Background

Manila, capital of the Philippines, is a growing city of approximately four million people. Its rapid growth is evident in the 15 newly built or refurbished five-star hotels, many new office buildings, high-rise buildings, and the new international convention center. The city has been the site of several recent international events such as the International Monetary Fund World Bank Meeting and the Miss World Pageant.

The Filipinas was an older hotel that had once been a major hotel in Manila. However, since the construction of many new modern hotels, it had been used principally by tourist groups. The hotel complex was composed of four buildings. The Aid Building was a four-story masonry structure used for apartments, with businesses on the first floor, and was separated from the main hotel by a masonry wall; it was not involved in the fire. The Litton Building was a seven-story masonry building used for apartments. It was physically separated from the main hotel by approximately eight feet, and was not involved in the fire. The main hotel consisted of two buildings joined by a common corridor on all floors. The portion facing Roxas Boulevard, the main entrance, was a seven-story structure of masonry construction and was referred to as Main 1. The other building was a ten-story masonry structure and was referred to as Main 2. Both buildings were reportedly built in 1958.

The Main 1 building contained approximately 16 rooms per floor on the second through the seventh floors, with the lobby and shops on the ground floor. The Main 2 building contained approximately 19 rooms per floor on the second through the ninth floors, with shops on the first floor and offices on the mezzanine level. There were reportedly 264 rooms available in all in the Main 1 and 2 buildings.

A mechanical equipment room was located in the basement of the Main 2 building. This housed two emergency generators, boilers for hot water, plus central air-conditioning equipment that supplied central air conditioning for the first through the sixth floors of the Main 2 building. Floors 7, 8, and 9 of the Main 2 building were equipped with window-mounted air-conditioning units serving each room. The construction of the air-conditioning ducts is unknown. The Main 1 build-
ing was also equipped with window-mounted air-conditioning units.

The interior-finish materials throughout the buildings were reportedly highly combustible. Walls both in corridors and guest rooms were of light wood paneling on wood furring, with an unknown insulation material behind the paneling in some areas. The ceilings consisted of suspended low-density fiberboard tile on wood framing in most rooms and corridors. Some areas in Main 1 had decorative wood ceilings on wood framing. All areas of the building were carpeted. The type of carpeting and padding is unknown.

The buildings' floors were made of poured concrete. Exterior walls as well as some interior walls were of masonry block. The exterior walls had a stucco finish. The roof of the Main 1 building was of metal on wood framing, while that on the Main 2 building was of poured concrete.

The Main 2 building was served by two interior stairways and two exterior fire escapes. The interior stairways were open at each floor level. The doors to the exterior fire escapes were reportedly locked at midnight for security reasons, with a slide-bolt-type lock on the inside. The two exterior fire-escape stairs and one interior stairway emptied into the lobby area, requiring travel across the lobby before one could exit through the front doors. The rear stairway emptied into the ground-floor corridor, with a nearby exit to L. Guerrero Street. This exit was also reportedly locked at the time of the fire. Three elevators located in the Main 2 building served the ground floor through the ninth floors. The shafts were of masonry construction, but details of construction are unknown.

Both buildings were reportedly equipped with a fire alarm system with manual stations and bells, but details of the system are not known. The extent of emergency lighting and exit lights is also unknown. There was reportedly no standpipe installed in the building.

The Fire

On Monday morning, November 14, 1977, 105 of the 264 rooms were occupied in the Main 1 and 2 buildings; 141 persons were registered, according to the hotel's records. (It was reported that "hospitality girls" frequented the hotel, and there is the possibility that several unregistered guests were also in the hotel at the time of the fire.) The majority of the guests were Japanese (25), American (23), German (16), Malaysian (16), Filipino (14), and Australian (12). The other guests were from a variety of Asian and European countries.

A typhoon was passing Manila at the time, and the winds were subsiding somewhat, but were gusting up to 47 kph. The hotel faced Manila Bay, so the winds from Typhoon Unding were unimpeded as they struck the hotel. Due to the high winds, the power had failed some time before the fire occurred. The hotel had used its generators during this power outage. However, it was reported that power had been restored some time prior to the fire.

The exact details of the origin or time of the fire are not known. However, the fire was discovered at approximately 6:30 to 6:45 am in the vicinity of Room 5010. This room was occupied at the time of the fire, as were Rooms 5009, 5012, and 5013. There were unconfirmed reports of an explosion immediately before the fire. It is not known whether the fire was discovered by a hotel guest or by a bellboy on the fifth floor. Guests were
Destruction in the front portion of Main 1 building as seen from the roof of the adjacent Hotel Aurelio.

The exterior fire escape of the Hotel Filipinas as seen from the Hotel Aurelio.

Front view of the Hotel Filipinas. Times Journal
awakened by bellboys or by other guests knocking on their doors. Several guests reported that the bellboys told them to leave the building, but did not indicate to them that there was a fire. There are conflicting reports as to whether the fire alarm bells were operating.

When the windows in the area of fire origin broke out, the wind pushed the fire rapidly throughout the fifth floor. The wind swirling about the building helped spread the fire to the floors below. One couple on the fourth floor reported that when they were awakened, flames were being blown down against their window from the floor above.

The open interior stairs quickly filled with smoke. As described earlier, the doors to the exterior fire escape stairways were locked each night about midnight with a slide-bolt-type lock, and this apparently caused considerable confusion among persons who tried to use these stairs to leave the building. Three persons reportedly jumped from the eighth and ninth floor of the Main 2 building to the roof of the Litton Apartments. Several persons jumped from windows. At least three persons reportedly attempted to jump into fire-fighters’ nets, but missed and were killed. There was an unconfirmed report that a British photographer jumped from the ninth floor into the hotel swimming pool and suffered only minor back injuries. One woman was rescued from the fifth-floor ledge at the front of the building by means of an aerial ladder while a fire department water tower used a fog pattern to keep the fire from coming out of the window over the ledge.

Unconfirmed reports indicate that a total of five persons died when they jumped from the building. Another 42 persons were confirmed dead, making a total of 47 dead. An unknown number of people were injured.

Discussion

Government reports were not available to the NFPA at the time of the author’s visit to Manila. (The Chief Fire Marshal did assure the author that a detailed report would be released following the Government’s investigation.) Certain observations concerning fire development and spread and building construction were collected through interviews of witnesses and hotel employees, and exterior surveys of the fire scene.

The exact details of the fire cause, building construction, and contents become somewhat academic in terms of the reasons for the rapid fire spread, which included:

a) finish materials consisting of highly combustible interior wood paneling and low-density cellulose ceiling tile;

b) unenclosed interior stairways; and

c) accelerated fire spread by high winds.

Other factors contributing to the large life-loss and extensive damage were delayed alarm, locked exits, limited access for fire fighters, and limited water supply.

The fire spread rapidly upward to totally involve all the floors above the fifth floor. The fire also spread downward to completely burn the fourth, third, and second floors. The first floor of the Main 1 building and the first floor and Mezzanine of the Main 2 building were not burned, but received considerable smoke and water damage. Unofficial estimates place the damage at 40 million pesos, or 5.4 million dollars.

Distribution of guests by floor, and floors on which the dead or missing were registered.

<table>
<thead>
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<th>Floor</th>
<th>No. of Registered Guests</th>
<th>No. of Dead or Missing</th>
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<tbody>
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<td>6</td>
<td>4</td>
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<td>8</td>
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<tr>
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<td>141</td>
<td>53*</td>
</tr>
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</table>

* Five of the missing guests were registered in the Litton building and three were registered in the Aid building.

The photo on page 59 is by the Daily Express.

CORRECTIONS

In the article “The Effect of Demographics on Fire Rates” that appeared in the January issue of FIRE JOURNAL, there were several errors on the figures presented. For example, in Figure 2, the caption under the map indicates that there are 41 tracts color-coded red, and 13 tracts color-coded white; the caption should read 41 tracts color-coded white, and 13 tracts color-coded red.

Similar errors were made in Figures 3, 5, 6 and 7.

Also, in the March FIRE JOURNAL, the photo on page 41 was flopped during the printing process. The caption, therefore, should read that the area of fire origin was at right.