

## **The Osaka Sennichi department store building fire.**

**May 13<sup>th</sup>,1972 Osaka prefecture**

**Masahiko Kunishima · Kenichi Horikawa (\*1)**

The shocking building fire was started half-ten at night on May 13th, 1972 in the busy quarter of Osaka Minami. It is the Sennichi department store fire. A Fire broke out on third floor and near the department store clothing counter which was under modification, and then the second and fourth floor were rapidly damaged through kindling and escalator part by fire. The smoke rapidly propagated from the elevator shaft, air conditioning duct, and staircase in the upper floor. Because no caution was informed, the customers and employees in the "Cabaret Play town" got panic due to the smoke, and then they lost the escape way, 118 persons died.

### **1 . Event**

Fire broke from the near Nichii clothing counter of the third floor on May 13th, 1972, around 10:27at night, because of the wiring of the electricity.

The time when the fire broke out, there were 6 electric workers on the 3rd floor , 6 persons of construction modification workmen in the bowling alley of 6th floor, 181 customers and barmaid in the Play town of 7 th floor, and 4 house detectives , 2 electric machine section workmen. The total was about 199 persons in the building.

### **2 . Course**

The 119 reports were done at 10:40 p.m. by the store security guard 13 minutes after the fire broke-out in the Sennichi department store.

The first team of the firemen arrived at the building at 10:43pm. At this time, black smoke was rushing from two north windows of 3F and 4F, white smoke was going out slightly from the north windows of 5F, 6F, 7F.

Afterwards, more and more ambulance and pump cars arrived, the total cars were 85, and rescue persons and firemen were 596.

The time of fire suppression was 5:43am on 5/14, and the time of fire extinguishment was 5:30pm on 5/15.The 2nd 3rd and 4th floor were almost burnt; the total burnt place was 8763 square meter, 118 of dead persons, 81 of injured persons, (27 of firemen included). This was the worst case of the building fire.

### **3.Cause**

The cause of the fire break-out was estimated to be a cigarette which a member of the



The discoverer of the fire was also out of the construction party, and "dark-red flame of about 40cm width and about 70cm in height" was recognized. The superintendent who received the news pushed the button of the fire alarm, and it was confirmed by the safety foreman in the protection room (around 10:43 p.m.). Afterwards, the house detective taught the usage of fire extinguisher to the construction party, and the house detective drained water using the digestive organ by indoor fireplug of the first floor, but the thick smoke filled it, and it was not effective at all.

The cause of the fire expansion was thought to be the presence of mass combustibles (ex, clothes). The dead were the people who were in the Play town on the 7th floor. The reasons of death were 93 persons due to carbon monoxide intoxication, 3 persons due to oppression, and 22 persons due to jumping off.



Picture 1 Sennichi Depart (one night passed) ( Source : Kenchiku-Bousai Thinking again about the Sennichi Department building fire. )

#### 4 . Immediate Action

The time the first firemen arrived at the building(10:43pm), the house detective opened the front face shutter, and lead the hose to the second floor, then started to squirt water(10:46pm).At this time, because 2nd floor was already burnt, it was

impossible to enter the 3rd floor.

16 minutes between the fire broke-out and the arrival of the first firemen, fire went up through 2nd and 4th floor, smoke expanded in the 7th floor. The flash overcoat (the phenomenon in which the whole room begins to burn at a stretch, when heat and combustible gas by the fire filled it, and when someone opened the door,) occurred within 17 minutes.

## **5 . Countermeasure**

The sense of crisis which comes from the delay of the setup of fire extinguish equipments in the hotels was risen up around the 1965. It was clear that especially among hotels, theaters, big stores, and medical buildings, the fire disaster was not to decrease if they do not set up the more effective fire extinguish equipments. Only the enhancement of the firemen was not effective method to cease fire.

The building methods and materials were enhanced day by day, month by month. The technologies to extinguish fire went up, Building standards Law and Fire protection Law was renewed. But these laws were not executed to the already-existing buildings. For example, in this fire disaster, there was not a sprinkler in the floor where the fire broke out.

The way that already-existing building was not to execute the laws was the cause of problem. And, there were few people who abide the law.

To stop the big fire disaster as Sennichi department store, and the following severe Building fire disaster Kumamoto Taiyo Department store, the big revision that law was to executed retrospectively was done.

## **6 . Sequel**

Osaka Prefecture Police Headquarters arrested the responsible person of electric work on suspicion of gross negligence over accidental fire suspicion, etc., and 6 persons were documented prosecution by it. In August, the following year, building party and 4 persons of "the play town" party were indicted. One person of the inside and the post manager of Sennichi department store administration manager in Nippon Dream Kanko died during the first trial. The ruling of the Supreme Court was issued on December first, 1990, as following. "Nippon dream kanko" who possesses and controls the building was accused for the accidental homicide in the business by the contravention of care duty of the fire defense measures. The accidental homicide was made in the business for "the play town" party's two persons. 2 persons neglected the repair of damaged fire escape apparatus, and the escape way of the customer was made

impossible.

## 7. Knowledge

This case is called the worst one in the Fire disasters of Japanese history. The concept of "Already-existing"(the buildings already existed and regarded as correct by the law at the time of the completion of building, is not to be regarded illegal due to the law change after the building completion.) permits the illegal buildings after the various change of law. The law is on the basis of the building technologies, so if we do not execute the law retrospectively, the danger building is to be left forever. The severe fire disaster as this case must not be looked down as a "rare exception".

(\* 1 ) Graduate school of Frontier science ,Univ Tokyo

< Reference >

The fear of high-density urban space – Sennichi department disaster warns

Asahi Journal Asahi-Sinbunsha 1972 . 05 . 26

Draft circumstance of the Sennichi department store disaster

Kazunori Onda Construction and society

Japan community of construction 1972 . 10

Re-thinking about the Sennichi department fire disaster

Takao Suzuki Kenchiku-bousai Japan society of disaster prevention.

Worst building fire disaster-118 people died

Kindai-shoubou Kindai-shoubousha 2000 . 07

Reconciliation and future objects of Sennichi department disaster

Jurist Yuuhikaku 1976 . 04

An appeal of Sennichi department disaster

Kounan-hougaku Jurisprudence academy of Kounan 1992 . 03