

Building Name Address	Use (as per FSA Annexed Table 1)	Date and Time of Incident	Structure and Stories Area	Extent of Damage (Damaged Area/ Total Area)	No. of Casualties
Shibuya Tokyu Building	Complex (16) a	April 10, 1965	Fire resistive 9 stories above ground and 2 below	All, Half, <b>Partial</b> , Small	Fatalities 0
		Breakout at 12:37 (approx.)			
22 Owadamachi, Shibuya, TOKYO		Notified at 12:42	Gross Floor Area 30,759 m <sup>2</sup>	2,754 m <sup>2</sup>  (9%)	Injured 38 (18)
		Notified by emergency call			
		Extinguished by 14:00			

### I. Summary of Fire Incident

(1) Summary	The fire started on the 7th floor of the building right before the completion of construction and the fire spread to the 8th floor instantly. The firefighters rescued approximately 30 construction workers who were trapped inside due to heavy smoke.								
	(2) Conditions per Floor	FL	Gross area	Damaged area	Use (Purpose)	No. of persons	No. of fatalities	Fire escape equipment	Firefighting equipment
		m <sup>2</sup>	m <sup>2</sup>	(Intended Use)			Inside stairs	42 sets of fire extinguishers	
PH					11		2 sets of through stairs	Water buckets	
9		2,588		(Restaurant)	20				
8		2,588	1,528	Tenanted office	7				
7		2,588	1,226	Tenanted office	6				
6		2,588		Tenanted office	Approx. 656				
5				Tenanted office					
4		2,763		Store					
3		2,763		Store					
2		2,763		Store, Office					
1		2,763		Store, Office					
B1				(Restaurant)					
B2				(Restaurant, Machine room)					
Total	30,759	2,754		Approx. 700	0				
(3) Origin of Fire	(Floor, Room, Part, Combustibles, Habitable/Non-habitable Rooms, Present/Absent)					(4) Cause of Fire	Unknown		
	<p><u>The fire emerged from a room (tenanted office) under construction on the 7th floor</u></p> <ul style="list-style-type: none"> <li>o The room was filled with a pile of cardboard boxes containing ceiling boards and another pile of cans of flammable adhesives.</li> <li>o The fire broke out during the lunch break and no-one was inside the room or near the fire.</li> </ul>								

<b>(5) Fire Propagation Path</b>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>(Location of Fire Source)</p> <p>From a room (tenanted office) under construction on the south-west corner of the 7th floor</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>(Propagation from Source)</p> <p>To cardboard boxes containing ceiling boards, and then to the flammable adhesives</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>(Propagation to Other Floors)</p> <p>Through the window of the 8th floor that was broken by the flames</p> </div> </div>	
	<p>◦ In the room, which was located at the south-west corner of the 7th floor, cardboard boxes containing ceiling boards caught on fire, and cans containing the flammable adhesives exploded, spreading flames instantly to the ceiling, partition walls and to a larger room. Flames also broke the window in the room and spread upward by breaking the windows on the 8th floor above.</p> <p>○ Main Reasons for the Propagation of the Fire</p> <ul style="list-style-type: none"> <li>◦ A large amount of cans containing flammable adhesive ignited and propagated the fire.</li> <li>◦ Immediate efforts to extinguish the fire failed and the fire emergency call was delayed.</li> <li>◦ Fire prevention equipment was not ready yet because the building was still under construction.</li> </ul> <p>○ Smoke Propagation Path</p> <p>Heavy smoke propagated throughout the 7th floor, and to the upper floors through vertical shafts such as the stairwell, escalator and car elevator.</p>	
<b>II. Summary of the Building</b>		
<b>(1) Built</b>	Construction, Completion and Major Renovations (Construction) July 9, 1963, (Planned Completion) May 31, 1965	
<b>Fire Prevention Management</b>	<b>(2) Vertical Shafts</b>	<b>(3) Fire Prevention</b>
	Stairs <input checked="" type="checkbox"/> Duct Spaces <input checked="" type="checkbox"/> Elevators <input checked="" type="checkbox"/> Pipe Shafts <input checked="" type="checkbox"/> Escalators <input type="checkbox"/> Other (Car Elevator) <input checked="" type="checkbox"/>	<p>◦ As safety measures for the construction, the building management organized 6 groups including a fire prevention team consisting of 1 leader and 3 members.</p> <p>◦ No fire-prevention manager was appointed.</p>
	The fire compartment for the vertical shaft was still under construction.	
	<b>(4) Fire Compartments</b>	<b>(5) Firefighting Equipment</b>
The fire compartment walls and fire doors were still under construction.	The firefighting equipment was also under construction. As for safety measures, they had prepared a number of fire extinguishers and reserved large barrels of water for firefighting.	

III. Actions Taken after the Fire was Detected										
(1) First Detected	<ul style="list-style-type: none"> <li>◦ <b>Detected by</b> ( 3 contractors for the interior work )</li> <li>◦ <b>How and why</b> ( Saw smoke )</li> <li>◦ <b>Action taken</b> ( Shouted out "Fire!" )</li> </ul> <p>-----</p> <p>After the lunch break, around 12:30, 3 contractors were walking up Stairs B. When they reached the 7th floor, they saw smoke coming down from the stairway ceiling and they rushed into the room (no door) from which the smoke was emerging. They saw flames reaching the ceiling from the piled-up cardboard boxes by the window. They shouted out to alert other workers about the fire. Contractor A ran down to the 4th floor and used an intercom to alert the security office (1st floor). He then ran back to the 7th floor and tried to extinguish the fire. Contractor S in the meantime remained at the site of the fire and started to extinguish it. Contractor O ran down Stairs B to notify the security guard.</p>									
(2) Emergency Call	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Emergency Call</b></td> <td style="width: 30%;">Yes [ ] ( )</td> <td style="width: 50%;">Time elapsed since the discovery ( ) minutes</td> </tr> <tr> <td></td> <td>No [ X ]</td> <td></td> </tr> <tr> <td></td> <td colspan="2">(A 119 call was made from someone in a building across from the Shibuya Tokyu Building )</td> </tr> </table> <p>-----</p> <p>No-one made an emergency call from the building on fire. The 119 call came from a stock brokerage firm in a building located across from the Shibuya Tokyu Building (south side). On the 2nd floor of the brokerage building, a client told one of the workers to look outside because he thought he saw a fire. The worker witnessed flames emerging from the 7th floor of the Tokyu Building and a few people near the fire, and so immediately made a 119 call from the office phone.</p>	<b>Emergency Call</b>	Yes [ ] ( )	Time elapsed since the discovery ( ) minutes		No [ X ]			(A 119 call was made from someone in a building across from the Shibuya Tokyu Building )	
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(4) Summary of Firefighting Activities	<p><b>(Obstacles or Difficulties in Fire Control)</b></p> <p>Arrival of the firefighters was delayed because this fire was the 2<sup>nd</sup> fire occurred in that neighborhood.</p> <ul style="list-style-type: none"> <li>◦ The firefighters struggled to reach the fire location on the 7th floor because of heavy smoke blocking the way up.</li> <li>◦ There were many falling objects, such as the broken glass from windows and window frames, and the water hose became damaged during firefighting operations.</li> </ul>									

<b>(5) Evacuation</b>	Means of Escape (No. of Persons)	Obstacles to Evacuation
	<ul style="list-style-type: none"> <li>◦ Stairs [ X ] (   )</li> <li>◦ Elevators/Escalators [   ] (   )</li> <li>◦ Escape equipment [   ] (   )</li> <li>◦ Directly to the ground from windows or openings [   ] (   )</li> <li>◦ Rescued [ X ] (   )</li> <li>◦ Other [ X ] ( Ladders on the car elevator )</li> </ul>	<ul style="list-style-type: none"> <li>◦ No windows [   ]</li> <li>◦ Barred openings [   ]</li> <li>◦ Locked emergency doors (Exits) [   ]</li> <li>◦ Alarm System [   ] (Poorly controlled, Malfunctioned, Not installed)</li> <li>◦ Power outage [   ]</li> <li>◦ Other [X]</li> </ul>
<ul style="list-style-type: none"> <li>◦ When the fire broke out, most workers were out for lunch and only a dozen of people were presumably on the upper floors.</li> <li>◦ Those who were on the lower floors and some on the 7th floor were able to evacuate via the stairs. Some persons trapped by strong flames and heavy smoke were able to escape to the rooftop and they climbed down ladders on the car elevators, except for 2 persons who were later rescued by firefighters. Firefighters also rescued 20 persons from the 8th floor and 5 persons from the 9th floor with a ladder truck. All trapped persons were ultimately rescued.</li> </ul>		
<b>(6) Casualties</b>	Healthy individuals (Drunk persons            ) Individuals in need of assistance Infants Elderly Handicapped Patients/ill persons	Obstacles to Evacuation
	None	<ul style="list-style-type: none"> <li>◦ No windows [   ]</li> <li>◦ Barred openings [   ]</li> <li>◦ Locked emergency doors (Exits) [   ]</li> <li>◦ Alarm system [   ] (Poorly controlled, Malfunctioned, Not installed)</li> <li>◦ Power outage [   ]</li> <li>◦ Other (   ) [   ]</li> </ul>
<b>IV. Issues and Lessons Learned</b>		
<ol style="list-style-type: none"> <li>1. The flammable adhesives and combustible materials that were piled up near the window helped the fire to spread easily through the window to the upper floor.</li> <li>2. The fire spread quickly because there was no firefighting equipment or fire compartments available because the building was still under construction.</li> <li>3. Although the fire itself was not so large, all but 38 people including the firefighters were injured.</li> <li>4. Instead of evacuating, many of the contractors helped control the fire and smoke and to communicate with others. However, once the fire was out of control, the stairway in the core part of the building was blocked by smoke and heat, and many of them became trapped.</li> <li>5. Falling objects such as broken glass and window frames became obstacles to the firefighting operations.</li> </ol>		