CASE STUDY ON
BRAZIL NIGHTCLUB FIRE INCIDENT

CPT Lim Wee Siang
Training Dept
HQ SCDF

16 July 2013
Details Of Incident

Date : 27 Jan 2013 (Sunday)

Time : At about 0215hrs (Local Time)

Venue : Santa Maria, Brazil

Event : “Freshers’ Ball” party organized by students from Federal University of Santa Maria

Other Information : Investigation claimed fire due to usage of pyrotechnic device on stage

Floor Area : 650 m²

Maximum crowd capacity: 1300 (Based on local regulations)

Approximated crowd : 1500 – 2000

Casualty count : More than 240 killed / 169 injured

Source : BBC
Location of Affected Nightclub

Single entrance & exit

Source: BBC
Key Factors Leading To The Incident

- Overcrowding
- Faulty extinguishers
- Usage of outdoor pyrotechnics
- Fire developed & spread rapidly – Emitting toxic fumes due to flammable acoustic foam
- Only 1 exit & entrance

Source: BBC & CNN
Incident Site

- Fire Fighters extinguishing the fire
- Trapped bodies found in the nightclub
- Public help evacuate injured victims
- Single entrance/exit of KISS nightclub
The Witnesses’ Recount

“We looked up at the ceiling in front of the stage and it was catching fire. My sister grabbed me and dragged me out on the ground… (The exit) was a **small door** for lots of people to come out by.”

*Survivor, Luana Santos Silva, 23*

“people were screaming ‘there’s a fire’ but the security didn’t budge and tried to keep the door shut… it was the **only exit.**”

*Survivor, Murilo de Toledo Tiecher, 26*

“….the stage started burning. So people started running, trying to get out of the club, but they couldn’t… the **smoke spreads very quickly, in a matter of seconds.**”

*Survivor, Leonardo Da Rosa*

“….When the fire started, a guard passed us a fire extinguisher. The singer tried to use it but **it wasn’t working.**”

*Guitarist, Rodrigo Martins*

“People started **panicking** and ended up treading on each other…. (Firefighters) had trouble getting inside the KISS nightclub because there was a barrier of bodies blocking the entrance.”

*Santa Maria Fire Dept Fire Chief, COL Guido Pedroso de Melo*

“Starting from there, we are going to propose the **consolidation** of a single federal law….”

*Head of Congress’s lower house, Marco Maia*
The Consequences

- **High casualty count:**
  - More than 240 killed & 169 injured
  - Asphyxiation (carbon monoxide & cyanide poisoning) and stampede during escape.

- **4 suspects faced charges of intentional/negligent homicide:**
  - Elissandro Spohr (Club owner)
  - Mauro Hoffman (Club owner)
  - Marcelo de Jesus dos Santos (Band vocalist)
  - Luciano Bonilha (Show producer)

- **Authorities & Officials investigating claims of:**
  - Overcrowding
  - Lack of supervision
  - Dangerous environment
  - Use of pyrotechnics

- **Right after the KISS incident, more than 150 nightclubs and bars found unsafe were closed.**

Source: Bloomberg
## Past Incidents Involving Entertainment Outlets (Overseas)

<table>
<thead>
<tr>
<th>Date</th>
<th>Incident details</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Feb 2003</td>
<td>100 people were killed in a fire sparked by pyrotechnics used by a band called Great White at Station nightclub in <strong>West Warwick, Rhode Island</strong>.</td>
</tr>
<tr>
<td>30 Dec 2004</td>
<td>A nightclub fire caused by usage of pyrotechnics killed 194 people in <strong>Argentina’s capital, Buenos Aires</strong>.</td>
</tr>
<tr>
<td>1 Jan 2009</td>
<td>A fire at <strong>Bangkok’s</strong> upscale Santika nightclub broke out due to usage of pyrotechnics when about 1000 patrons were ringing in the new year. 64 people died in the fire.</td>
</tr>
<tr>
<td>31 Jan 2009</td>
<td><strong>Fireworks</strong> shot off at a party at a bar in <strong>Changle City in China’s Fujian</strong> province sparked a fire. 15 people were killed.</td>
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<tr>
<td>5 Dec 2009</td>
<td><strong>Fireworks</strong> triggered a fire at a nightclub in <strong>Perm, Russia</strong>. 156 people were killed.</td>
</tr>
<tr>
<td>17 Aug 2012</td>
<td>A fire swept through a popular nightclub on the Thai Island of <strong>Phuket</strong>. 4 people were killed. (Investigation still ongoing.)</td>
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</tbody>
</table>

*Source: CNN*
Fire Safety Requirements in Public Entertainment Outlets (Singapore)

- Occupancy load (1m² / person)
- Fire Fighting Systems
  - Fire Extinguishers
  - Hosereels
  - Fire Alarm Systems
- Emergency Exits
- Exit Lights
- Strictly no usage of pyrotechnics or sparklers
Common Inspection Findings & Non Compliances (Singapore)

- Overcrowding
- Exit signs not lit or obstructed
- Smoke detector / alarm system isolated
- Obstructed exits & passageways
- Obstruction to fire safety measures
- Usage of sparklers as a form of highlight when serving drinks
Actions Taken Against Errant Operators (Singapore)

No. of FHANs/NFSOs/NOCs Issued

<table>
<thead>
<tr>
<th>Year</th>
<th>FHANs</th>
<th>NOCs</th>
<th>NFSOs</th>
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<tbody>
<tr>
<td>2010</td>
<td>158</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2011</td>
<td>89</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>2012</td>
<td>22</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2013 (Jan-Jun)</td>
<td>24</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Penalties For Errant Operators

<table>
<thead>
<tr>
<th>Operator</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOCs</td>
<td>Fine of $100 - $500 [Court Action for recalcitrant]</td>
</tr>
<tr>
<td>NFSOs</td>
<td>Fine of $100 - $500 [Court Action for recalcitrant]</td>
</tr>
</tbody>
</table>
Champagne sparklers banned in clubs

Due to safety concerns, these sparklers will not be allowed to be used at nightlife premises

Melissa Kok

The thrill of being served premium champagne lit by sparklers is no longer a luxury that nightclubs in Singapore can offer to patrons.

Life! understands that over the past two weeks, the Singapore Civil Defence Force has been sending out advisories to nightlife spots offering this bottle service, instructing them to refrain from igniting sparklers within their premises as they are deemed a fire safety hazard.

Attaching lit sparklers to bottles of champagne became popular here about two years ago and it became a trendy thing to do at clubs such as the now-defunct members-only nightclub Filter; ultralounge Pangaea, Zouk, Dream, Mink and club lounge Royal Room.

The attention-grabbing practice was especially popular among big-spending opening magnum bottles of Dom Perignon or Cristal champagne, which can cost upwards of $1,000.

When contacted, an SCDF spokesman explained the ignition of fireworks and pyrotechnics is prohibited as it increases the likelihood of fires and constitutes a fire hazard.

Life! obtained a copy of the advisory and found that it also says that nightlife spots should stop the practice with immediate effect.

Nightclub operators affected by the new rules, including those managing Zouk, Pangaea, Mink and Royal Room, were the first to introduce the practice, but it gained popularity three years ago when now-defunct Filter at Gallery Hotel offered the service to its patrons.

The service is offered at nightlife spots in cities including New York, London, Ibiza and Shanghai.

Mr Phillip Poon, 35, one of the directors for Massive Collective, which manages nightspots Dream at Clarke Quay, and Mink and Royal Room at Pan Pacific Singapore hotel, says: "It's a key aspect of our club but I think if it affects all clubs across the board, we don't have much choice but to look for alternative methods to showcase the drinks."

At his club, sparklers are attached to champagne bottles 1.5-litres or more if patrons spend a minimum of $1,000.

Sparklers are a ubiquitous presence at these nightspots, with patrons often ordering three or more magnum champagne bottles at a time.

On the opening night of nightclub Dream last month, one patron ordered more than a dozen Dom Perignon champagne bottles with sparklers, with servers parading the bottles in a row and posing for photos.

Mr Poon says he learnt of the Singapore Civil Defence Force rules only over the past weekend and is currently reviewing his operation policies.

He added that his club has other ways of enhancing bottle service, such as using ice buckets with flashing LED lights or serving 3-litre bottles of champagne in a neon-lit gold cage. These do not come at an additional cost.

Mr Gordon Foo, coordinating director for operations for St James Holdings which manages nightclub multiplex St James Power Station and Mandopop club Shanghai Dolly at Clarke Quay, says: "We have the sparklers only at Shanghai Dolly so the impact is not that bad. The sparklers appeal to a different segment of clubgoers and for the majority of our customers, the impact is minimal."

He says the majority of clients prefer brown spirits over champagne. "The ban on its use was just a matter of time due to safety concerns, especially when you hear of club fires such as the one at Santika Club in Thailand which was started by a sparkler, or the recent one at Kiss club in Brazil, which was started by a flare ignited during a band performance," he added.

At least 66 people died in the Thai club fire in 2009 while 241 people died in the Brazil fire in January this year.

Reactions to the banning of sparklers have been mixed among clubgoers.

Bank manager Jeff Pua, 31, says: "It is a terrible shame to see such a basic novelty offered by top clubs around the world, being banned for safety reasons. The introduction of sparklers to the party scene in Singapore has created much-needed energy and atmosphere."

But finance professional Arun R., 27, who frequents clubs such as Royal Room and Mink, welcomes the change. He says: "Fire and drunk people never make a good combination anyway."
CONCLUSION

Usage of pyrotechnics is strictly prohibited for any indoor stage performances (Public entertainment outlets) in Singapore. Enforcements are conducted by SCDF to ensure public entertainment outlets abide lawfully to the Fire Safety requirements stated in the Fire Code Singapore.

Thank You