TFR INCIDENT # 17-61890
TPD INCIDENT # 17-477091

September 12, 2017

305 E. Columbus Dr. Tampa, FL 33602

Photo source: Tampa Bay Times

Tampa Fire Rescue
808 E. Zack St.
Tampa, Florida 33602
(813) 274-7000
Description of Activity:
The purpose of this investigation is to determine the origin and cause of a structure fire.

Case Summary:
On Tuesday 09/12/2017 at approximately 1838 hours Tampa Fire Rescue responded to and extinguished a structure fire at Lee Elementary school located at 305 E. Columbus Dr. Tampa, FL 33602. Upon arrival TFR Engine 1 Captain Ricardo Palomino found a 3-story masonry constructed school building with heavy smoke coming from the eaves and the center and west cupola. They also observed flames from the west cupola. The incident was upgraded to a working fire initializing an investigator call-out. I, Fire Investigator David Kopelman and Investigations Supervisor Michael Zurla, were notified to respond and assist with the origin and cause investigation. After a thorough origin and cause investigation the fire was determined to be accidental in nature due to an electrical malfunction. The exact nature of the electrical malfunction could not be determined due to the amount of damage; however it is believed that the fairly extensive water damage sustained by the structure during Hurricane Irma likely was a factor.

Narrative Summary:
On Tuesday at 9/12/17 at approx. 1838 hrs. TFR responded to and extinguished a structure fire at the listed address. On 9/12/17 at approx. 1849 we were notified via pager by Tampa Fire Rescue Communications Division to respond and conduct an origin and cause investigation. I arrived on scene and met with TFR Engine 1 Captain Palomino, Division Chief Mark Bogush, and TPD personnel and discussed the facts and circumstances of the fire.

- Captain Palomino stated they found heavy smoke coming from the center and west cupolas.
- He stated he also saw flames from the west cupola.
- Chief Bogush relayed that crews made an interior attack and all fire was in the attic. They were ordered out of the structure due to deteriorating fire conditions.
- The actions of TFR are reflected in case # 17-61890.
The actions of TPD are reflected in case # 17-477091.

**Scene Description:**

The fire scene consisted of a 3 level masonry constructed school building approx. 46,000 ft². The structure was built in 1906 and served as Lee Elementary School, a public school owned and operated by Hillsborough County Public Schools. The property is bordered by E. Columbus Dr. to the north, N. Jefferson St to the East, E. Amelia Ave. to the south, and N. Morgan St to the west. The main access doors entered into the 2nd level which was considered the 1st floor. The ground level was slightly below grade with windows accessible to the outside. The 3rd level is known as the 2nd floor and highest occupiable level. Access to the attic was provided via secured hatch and ladder. The attic consisted of heavy timber construction and contained wiring for the buildings electrical systems as well as other systems. The building had 3 cupola features, the center cupola being larger and accessible by ladder from the attic. The east and west cupolas were decorative and not accessible.
**Fire Scene Examination:**

The scene was processed on September 14, 2017 pursuant to exigent circumstances. The examination of the fire scene was conducted using a systematic approach with appropriate attention given to all relevant details. We identified and secured the investigation scene. We evaluated the scene from exterior to interior then from least damaged to most damaged area(s). We began first by working to establish the area(s) of origin. We then worked to determine with a reasonable degree of professional certainty the cause of the fire.
EXTERIOR:

(Picture before any fire damage)

We began the exterior examination on the North side of the building and walked completely around the structure in clockwise direction searching for evidence of the fire’s origin and cause.

North Side

Upon initial arrival the heaviest degree of fire activity was observed in the attic area between the center and west cupola. Thick black smoke was observed venting from the cupolas and the first signs of flame breaking through the roof came from the west cupola and the roof area between the center and west cupola. These areas of the roof system were generally intact during the earliest portions of firefighting operations. The area between the cupolas, as well as the center cupola, was the first parts of the roof system to fail and collapse. All entrance doors on the North
side were secured at the time of fire department arrival. Engine 7 forcibly opened the doors furthest to the west of the north side of the building.

East Side
The east side of the building showed no involvement during the early and middle stages of the fire. Towards the end of firefighting operations fire had spread to the attic area near the east end of the building and vented from the east cupola. All doors were secured at the time of the fire departments arrival. Doors were opened by school security personnel.

South side
The south side of the building showed no signs of fire involvement during the initial stages of the fire. As the fire progressed flames were observed spreading through the attic space toward the west. Secured areas of electrical equipment are located outside of the building and showed no signs of damage. The main power feed extended up the southern wall and entered the attic space above room #208. All doors were secured at the time of fire department arrival.
West side

The west side of the building initially showed no signs of fire involvement. As the fire progressed fire originating from the center portion of the attic area began to spread into the west side attic space. Towards the later stages of the fire the west side roof system failed. All doors on the west side were secured prior to fire department arrival. One door to the cafeteria was forced open by TFR Engine 4. The northern doors on the west side were opened by school security personnel to allow fire department access.

Aerial

I observed the structure from an aerial vantage point. The roof system from the center to the west side had failed and collapsed.

The exterior exam revealed there was no exposure damage to any other buildings or vehicles in the surrounding area. A visual inspection of the entire property revealed it to be in good overall condition prior to the fire. The exterior examination concluded the fire originated in the interior of the building likely in the attic area.
**Interior examination:**

I began the interior investigation by entering through the east entrance door. I surveyed the fire damage analyzing intensity patterns and building materials. I followed burn damage from the least burned area to the most severely damaged area.

**Ground floor (lowest level)**

No fire damage was observed on the ground (lowest) floor. Water and debris from fire suppression operations was noted.

**First Floor (2nd Level)**

No fire damage was observed on the first (2nd level) floor. Water and debris from fire suppression operations was noted. An administrative office is located on this level in room #110. The fire alarm panel was located in this room. The panel displayed several fire alarm notifications in the following order:

1. Attic above 208 classroom Heat Detector
2. 2nd Fl Elevator Lobby Smoke detector
3. Ground Fl elevator Lobby Smoke Detector
4. Ground Floor
5. 004 Cafeteria Smoke Detector
6. 004 Cafeteria Smoke Detector
7. 1st FL Elevator Lobby Smoke Detector

The exact times that each alarm activated has not been pinpointed, however, personnel from the school system’s Communication and Electronics division familiar with the Fire Alarm system confirm this is the order they activated.
2nd Floor (Highest Level)
I ascended to the 2nd floor which is the highest of the 3 levels of the building. I came up the East stair. I observed no fire damage below ceiling level. I moved toward the center of the building and could immediately see where the roof had collapsed into the center hallway just west of the door to room #207. The drop ceiling had fallen due to water and the buildings wiring systems were observed in conduit between the drop ceiling and the likely original wood slat ceiling above it. Further examination of the interior of this area was impossible due to the amount of debris. However I observed very little signs of fire or smoke damage below the level of the ceiling. Debris from the roof trusses and other attic materials showed heavy signs of charring.
Attic and aerial views of 2\textsuperscript{nd} (highest) floor

Due to the level of damage and safety considerations the attic area was only able to be examined from aerial photographs. The inside of several inaccessible rooms could be seen from the aerial photographs. No fire damage patterns in any of the rooms could be observed below the ceiling level. It could be determined from this that the fire originated in the attic space. The built-in ventilation provided by the cupolas as well as the age and nature of the structural materials in the attic likely contributed to the rapid growth and spread of the fire. Examination of the burn damage in the attic combined with observations of the fire during its active stages, led to the conclusion that the fire originated in the attic space above room #208.

\textbf{Timeline of events}

In gathering background information and interviewing witnesses and school board staff, several notable events took place relating to the school that had to be considered. The following is an approximate timeline of these events.

- \textbf{9/7/17} - As it becomes clear that the Tampa area is in the path of Hurricane Irma, Hillsborough County schools are closed.
- \textbf{9/10/17} - Hurricane Irma travels over the area. Power to the school and surrounding area goes out.
• **9/11/17 - 1400hrs** Power is still out. Principal Smith does a walkthrough of the school to check for damage. She observes heavy amounts of water damage and damage to ceiling tiles in several areas.

• **9/12/17 - approx. 0900-1200hrs** roofers are finishing up some shingle work. They are not using tar or torches but nail guns only. Two custodians attempt to clean up some of the water damage in the cafeteria. They are only in the ground floor cafeteria area due to the absence of power and the rest of the building being very dark.

• **9/12/17 - 1636hrs** TECO restores power to the building and some surrounding areas. Immediately some neighbors who are on their porch at this time hear a strange noise coming from the school. Some describe as a loud buzz. Another neighbor said it sounds like a generator running.

• **9/12/17 - 1639hrs** Hillsborough school security receives an intrusion alarm for a security alarm zone that includes the East and South entrance doors. Due to the proximity of this alarm to the time when power was restored, as well as the fact the all doors were secured, it is later concluded that this was a false alarm triggered by the loss and restoration of the power.

• **9/12/17 - 1837hrs** school security officer is dispatched to investigate intrusion alarm. He arrives on scene approx. 2 minutes later.

• **9/12/17 - 1839hrs** school security receives a fire alarm. The officer on scene observes smoke coming from the roof. Tampa Fire rescue is notified.

**Injuries:**

There was no fire injuries reported as a result of this fire.

**Estimated Value of Loss:**

Total fire loss was estimated to be approximately $3,000,000.

**Weather:**

The weather at the time of the fire was warm and clear. The weather at the time of the fire was a non-contributing factor. However the weather leading in the days leading up to the fire may have played a factor. Specifically the damage the building sustained during Hurricane Irma likely was a contributing factor.
Fire Discovery:
The fire was reported on 9/12/17 at approx. 1838hrs from school security and several other sources throughout the neighborhood.

Evidence:
- Photographs documenting the fire scene were taken by TPD CST T. Williams #833.
- Additional photographs were obtained from multiple sources including school security personnel and the Tampa Bay Times.
- Video footage from Tampa Police Helicopter was obtained.

Statements
The following are some of the individuals who gave statements concerning the fire and the building:

TECO
- Tony Cua 813-220-2882
- Jason Moore 813-476-1590

Hillsborough county Schools
- Ben Moore 813-843-8859 (roofing)
- Ben Jones 813-408-9054 (Construction manager roofing)
- Jainarine Ramtahsingh 813-635-1264 (C&E alarm technician)
- Isaac Walker 813-635-1210 (Communications & Electronics)
- Stephen Ellis 813-545-8351 (Facilities roofing services)
- Kevin Faulkner 813-840-7222 (School Security)
- Sgt. Chris Milana (school Security)
- Cpl. Bidell (School Security)
- Beverly Smith (Principal)

Neighborhood survey
- Sly Lester 813-863-4909
Conclusion:

Based on the observations at the time of the fire and subsequent investigation, the following are conclusions offered by this investigator. These conclusions are based on a reasonable degree of professional certainty.

It is the opinion of this investigator that:

- The fire originated in the attic space above room #208.
- Due to the extensive damage the exact point of origin could not be determined.
- The only high heat sources known to be in the area of origin was the building’s electrical wiring.
- The building recently sustained extensive water and physical damage from a hurricane.
- The fire occurred soon after the building’s electrical system was reenergized.
- The fire was caused by a failure in the building’s electrical system.

In the elimination process used to identify the fire’s point of origin and probable cause, the fire debris was examined and other possible ignition sources at or near the area of origin was examined and eliminated. The only competent ignition source available at the time of this origin and cause investigation was that of an electrical failure likely contributed to by building damage sustained during a hurricane. These findings are supportive of an accidental fire.

Status of Case:

This fire was determined to be accidental in nature and administratively closed.

Peer Review:

This report was peer reviewed by Fire Investigations Supervisor Mike Zurla on 10/3/17.