



Montgomery County Fire and Rescue Service

POST INCIDENT ANALYSIS

**4988 Boiling Brook Parkway
Rockville, Md.
#07-0099993**

October 08, 2007



**Submitted by
Assistant Chief Greg DeHaven**

Introduction

December 08, 2007 @ at 0919 hours Fire/Rescue and Police units responded to a structure fire at 4988 Boiling Brook Parkway for a report of smoke coming from the roof. E231 arrived on the scene and reported a four story commercial structure with heavy smoke visible on the top floor and at the roof line. They completed a good IOSR with water supply instructions from the Alpha side. A request for a RID and second alarm was made and the initial hand line was stretched through the front door and up the stairwell to the top floor. I arrived (C200) arrived shortly after and communicated with the officer on E231 that I was current with his report and would establish Command on the Alpha side.

Units arriving in the rear reported two levels. This was a large warehouse Type II construction. Unique construction features created many challenges for the crews operating inside. It was reported that workers welding on the roof may have started the fire with a torch. Units located a fire on the second (top) floor and quickly extinguished.

Further review determined the fire had dropped down from the ceiling space and ignited a small pile of debris on the floor. Once the fire was reported extinguished, units began to check for extension and determine the area of origin.

There was \$50,000 dollars damage to the structure and \$10,000 damage to contents.

Structure/Site Layout

- The structure is a two story brick and block Type II construction. The roof assembly had several insulated membrane layers with tar and gravel covering.
- The interior ceiling space was parallel metal truss with a 2' plenum space covered by ceiling tiles. The structure measured 200' deep and 150' wide in the unit of origin.
- The warehouse gave the appearance of four floors on the Alpha side and two floors on the Charlie Side. This was later determined to be a basement with a normal 12' ceiling height and two floors above that measure 25' of ceiling height.

- The stacked windows gave the appearance of a four story structure. The exposure units on Alpha side were 4942 and 4948. The Charlie side was 4972, 4970, 4968, 4966 and 4964. The exposure units suffered water and smoke damage. The unit of origin was under renovation.

Weather

- Cool and dry with little humidity. The sun was shining.

Fire Code History

- None noted

Communications

- The PSCC dispatcher on 7C (7 Charlie) overall did a good job.
- Fire ground talk groups were adequate and utilized fully. The second alarm units and assignments from staging were given on 7D (7 Delta).

On Scene Operations

- Water supply was established from three separate hydrants located on the Alpha, Charlie and Bravo sides.
- The IAC stretched a 500' 2" line from the Alpha side up the stairwell to the top floor. Several units in the rear took advantage of leader lines for optimum stretch.
- Once the fire was located and communicated out, no more lines were stretched.
- Divisions and Groups were established to support the span of control.
- C3-7 was assigned the top floor (4th) as Division 4 with E231, T3 and E211.
- C3 assisted at the command post.
- BC4 was assigned the Charlie side.
- A cutting torch was being used on the roof to remove old HVAC support systems. The contributed to the fire origination. Drop down to the top floor on combustibles was the area of origin.
- A roof division was established to ensure inspection holes were cut to check for extension.
- A ventilation group was established to deal with the stubborn smoke removal.
- Further review of the structure revealed there was a flash fire in the plenum space which explained the enormous amount of smoke on arrival.

- The paper covering on the insulation material which was located in the plenum space had flashed.
- The command team assembled and developed a new set of incident objectives to deal with the large task of overhaul.
- Overhaul operations consisted of hydraulically blasting the ceiling tiles out of place to ensure all areas of the plenum space was exposed.
- This allowed wetting down of the entire area that flashed. This area measured 200' x 150'
- After completion of total extinguishment and overhaul, the command team developed and executed a demobilization plan.
- The only use of the second alarm units was to support the overhaul operations.

Staging

- Second alarm units were initially staged in the parking lot in front of the fire building.
- Site access was close to the scene and could handle the apparatus from several directions.

Support Functions

- Rehab was established on Side "C" with A238.
- There were no equipment or apparatus failures.
- Functions with outside agencies were properly coordinated (i.e. Police, Gas and Power Company,)
- CT5 provide fluids and food to personnel.

Safety Group

- Standby team was identified as A238 initially
- There were no fire/rescue personnel injured.
- All safety SOPs and regulations were enforced by the Safety Officer.
- RIG was established on Side C.

Accountability

- ECC notified Command we were 15 minutes into the incident and Command ensured actions were taken for accurate personnel. This was accomplished by checking with Division/Group Supervisors operating within the structure and what task(s) were being performed and which units were with them.
- The status of units, Divisions/Groups and support personnel were maintained throughout the incident.

Investigations

- None was provided given the witnessed operations on the roof and subsequent drop down in the structure.
- Code enforcement officers were on the scene to write specific orders to correct that were found during the post incident walk through.

Lessons Learned that were discussed at a Hot Wash

- On-scene reports are critical to ensure the picture is painted for all units coming into the scene. This particular structure was confusing with the exterior view and interior layout. However, interior crews quickly communicated this unique layout.
- All units did an exceptional job securing three different sources of water supply. The building was giving the initial units plenty to be concerned about with the anticipation of a long campaign.
- Attack lines were strategically placed for a heavy attack from various angles but never presented an issue with apposing hose lines.
- Coordinated attack with the special services went well followed by a through systematic search.
- Ventilation techniques worked well with all personnel weighing in on the best approach to accomplish this in a wide open space with no opening other then the garage doors on the Charlie side.
- Roof operations proved challenging with the many layers.
- Prior to the hydraulic blasting of ceiling tiles the command team walked all of the first alarm units through the structure for a unique view of the ceiling space where the flash fire occurred.
- Other building construction features provided useful education for the newer employees.

Units on Incident

E231	AT23	A238	FM30
E211	AT51	M39	SAFETY1
E251	AT18	M20	U3
E261	T3	BC3	UT3
	T40	BC4	
	RS3	C200	
E201	RS19	C3	
E33	RS15	C3-1	
E502		C3-7	
E51		C5-3	
E61		CP1	
		CT5	