



MONTGOMERY COUNTY FIRE/RESCUE SERVICE

POST INCIDENT ANALYSIS



Two-Alarm Arson Fire

Box 03-07 - 301 South Horners Lane

November 19, 2014

Incident 14-0132812

Battalion Chief Michael Leigh

TABLE OF CONTENTS

[Incident Overview](#)

[Building Structure/Site Layout](#)

[Fire Code History](#)

[Communications](#)

[Pre-emergency Planning/Water Supply](#)

[Staging](#)

[Support Functions](#)

[Safety Group](#)

[Accountability](#)

[Investigations](#)

[Lessons Learned](#)

[Overall Analysis of Incident](#)

Incident Overview

Note: This post incident analysis is based upon the review of the incident audio tape, interviews with crews who operated at the emergency scene and the review of completed RMS Unit Reports.

On November 19, 2014 at 13:21 hours, MCFRS units responded for the house fire assignment at 301 S. Horners Lane in Rockville. The incident location is in very close proximity to Fire Station 3 (FS03), and a column of smoke was evident from the station. When the units had traveled approximately .25 miles from FS03, and turned onto Park Rd, the smoke became much heavier and darker. On arrival, Paramedic Engine 703 and Aerial Tower 703 confirmed a large single family home with heavy fire and smoke evident, and requested the Rapid Intervention Dispatch and Task Force assignments. Battalion 703 was also responding from FS03, and asked the Emergency Communications Center (ECC) to upgrade the Task Force to a full second alarm assignment given the very rapid expansion of fire, size of the house, and potential for trapped victims. Battalion 703 then established Command on Side Alpha across the street from the house.



Fire conditions as the first line is being deployed from PE703. Note fire conditions in Quadrant Bravo, and the first and second floors of Quadrant Delta.

Of note, is the [911 call] to scene time was 3:07, and units arrived with very advanced fire conditions in a large house located on a major roadway with significant traffic. This led Command to a high index of suspicion for some sort of explosive event – and as such would have a high potential for victims trapped, catastrophic structural failure, or additional rapid deterioration of conditions. Command then decided to utilize functional groups for Fire Attack and Rescue. With the need for a rapid search, the 1 ¾” attack line first pulled was augmented with a 2” attack line with the direction to attempt a rapid knock and search where tenable. The second engine (Paramedic Engine 715 leaving FROMS) arrived quickly and attempted to establish a second water supply for Paramedic Engine 703. The OIC used Altaris maps for hydrant locations, but discovered that the hydrant shown in Altaris did not exist. (There had been water main work on Park Rd recently, and maps were inaccurate due to the changed location of hydrants on Park Rd.) Paramedic Engine 715 then handjacked 200’ of supply line toward Grandin Ave, where Paramedic Engine 721 took their line. PE715 then supplied PE703.

Personnel assembled quickly in the front yard and prepared to make a rapid exterior attack.



Personnel then began an attack with a rapid knock down at the front door working toward the Delta Quadrant and interior stairs. A quick primary search was also begun at this point. Additional units arrived and filled out the Fire Attack and Rescue Groups. Engine 705 approached from Seth Rd, and also established expanded water supply for Paramedic Engine 703.

301 SOUTH HORNERS LANE – BOX 03-07

While the Attack and Rescue Groups were operating on the interior of both floors, the conditions on the first and second floors of Alpha Quadrant began to deteriorate as shown in the next sequence of photos.





At this point units operating on the interior were instructed to withdrawal from the building until the conditions could be stabilized via exterior attack. A Personnel Accountability Report (PAR) was completed for units, and additional large attack lines were brought into play, knocking the fire on all sides. As soon as the conditions were deemed tenable, units re-entered the structure, hitting additional hot spots and continuing the primary and secondary searches. All units were eventually utilized with extensive overhaul on all floors in coordination with FEI personnel.

During the incident, it was determined that three persons had been in the building at the time the fire started, but were able to escape via the door on Side Bravo. Command was also notified by a TV camera operator that an adult male had just confessed to him on camera as to having set the fire with gasoline. On-scene police officers from Rockville City were then notified and took the male into custody, and Fire and Explosive Investigations (FEI) were also notified. An arson K9 was also brought to the scene from Howard County and confirmed the presence of accelerants in the both the structure and on the suspect's clothing. No civilians or FRS personnel were injured. Loss was determined to be \$250,000 to the structure, and \$150,000 to contents.

Building Structure/Site Layout

301 South Horners is a two-story single family home with a full basement, four bedrooms and a garage converted to storage/living space. The home was built in 1973 with ordinary wood-frame construction and a total of approximately 3,500 square feet. It sits on the Southeast corner of South Horners Lane and Park Road. The location assisted with aerial placement on both the Alpha and Delta sides of the structure, although limited by power lines and trees.

Fire Code History

Review of recent code compliance issues was not available; however there was evidence on scene that some construction had been underway recently. There was no impact to fire operations.

Communications

The incident was dispatched rapidly with a call to dispatch time of 1:31 (benchmark of 2:00), response time for the first engine and truck company was 1:40 (including turnout time and travel time). All first alarm and Rapid Intervention Dispatch (RID) units responded on talkgroup 7 Charlie, with second alarm units on talkgroup 7 Delta. The initial units gave a comprehensive on-scene report, and additional resources were immediately requested. Units operated with radio discipline, and acknowledged instruction from Command via group supervisors. Timely updates were provided to ECC and units operating on scene, and PARs were completed without difficulty. The only difficulty encountered by Command was precipitated by the use of a spare command vehicle with poor speaker placement and lack of a headset system. This necessitated a command officer to leave the “sterile cab” environment to use a portable radio for communications on alternate channels at times.

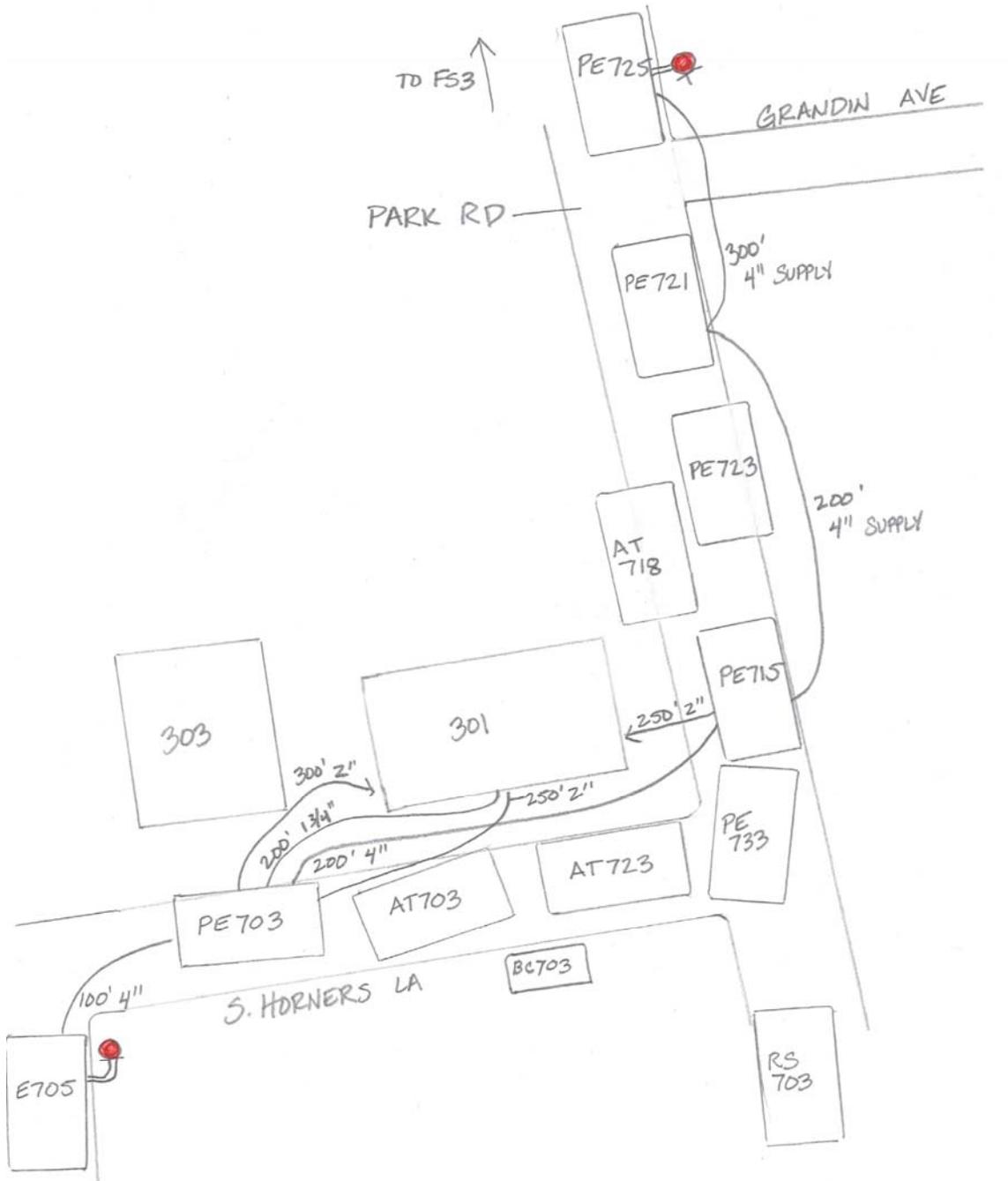
Pre-Emergency Planning/Water Supply

There was no specific preplan for this structure other than the area map from FS03. As stated earlier, some hydrants were moved, while some remained in Altaris (including one on the Northwest corner of the intersection). Paramedic Engine 715 was able recover quickly and add to the water supply operation at a critical time. Also of note is that there are two intersections of Park Rd and South Horners, which had the potential to lead to confusion with layout information.

Staging

Second alarm units that were not immediately assigned were staged on Park Rd and assigned to talkgroup 7 Delta. Command Bus 700 was quickly released. However, other units assisted with water supply utilizing hydrants in the vicinity of Park Road and South Stonestreet Avenue.

Water Supply and Attack Lines





Left to Right on Park Rd – PE721, PE723 and PE715 – South Stonestreet Avenue is in the distance.

Support Functions

The Rehabilitation Group was initiated early into the incident on the Alpha Side near the command post. The EMS duty officer (EMS703) coordinated with Medic 723 and Ambulance 703 to ensure all personnel rotated and cleared Rehab. Air 733 (AR733) and Canteen 740 worked in unison with the Rehab Group to ensure personnel were hydrated and Self Contained Breathing Apparatus (SCBA) Cylinders were available for service.

Function with outside agencies were properly coordinated (i.e. MCPD, Red Cross, Power, and Gas Company). Both power and gas service were secured for the entire building by the fire department. Rockville City Code Compliance posted the structure as unfit for occupation.

Safety Group

Ambulance 703 was immediately assigned as the two-out, however given the attack strategy, this was not required prior to the arrival of the Rapid Intervention Company (RIC) and additional companies. The Rapid Intervention Group (RIG) was filled out with Paramedic Engine 723, Truck 725, Rescue Squad 742 Bravo and Medic 703, staging on Side Alpha. These units were eventually rotated and released or sent to relieve units performing overhaul. Both Chief 705B, and Safety 700 performed as the Incident Scene Safety Officer, with Chief 705B, and BC704 also being rotated through interior operations checking IDLH issues.

Accountability

Crews were accounted for utilizing the Incident Tactical Worksheet and the Daily Line-up form carried in the Battalion 703 vehicle. Additionally, crews were accounted for utilizing the required Personal Accountability Report (PAR) based on the required Incident Duration Reminders (IDR) timeline. There were no issues related to accountability on the incident. All personnel provided timely reports as requested.

Resources

1st Alarm

Paramedic Engine 703	Aerial Tower 703	Ambulance 703
Paramedic Engine 715	Aerial Tower 723	Battalion Chief 703
Paramedic Engine 723	Rescue Squad 703	Battalion Chief 704
Paramedic Engine 721	Duty Chief 700	Safety 700
Paramedic Engine 733		
Paramedic Engine 725		

RID

Truck 725 Rescue Squad 742B Medic 703

2nd Alarm

Paramedic Engine 718	Aerial Tower 718	Operations Chief 700
Engine 726	Truck 731	Volunteer Chief 700
Paramedic Engine 731	Air 733	Medic 723
Engine 705	Command Post 700	

Other

Chief 742 Canteen 740

Chief 705B Emergency Medical Services 703

Fire Explosives Investigations units 758, 756, 750, 767

Lessons Learned

- Units must maintain situational awareness and utilize Crew Resource Management best practices when arriving at an incident with unexplained advanced fire conditions. This includes completing full 360 degree surveys, and remaining suspect of not only accelerant use, but possible intentional damage to the structure to facilitate fire spread. This same concern could be related to drug labs, or other hazmat situations.
- Personnel should remain cognizant of the possibility of accelerant use as it relates to normal fire tactics – in this instance the fire flared back quickly, whereas that probably would not have occurred without the presence of accelerants. This necessitated the rapid withdrawal of crews due to changing conditions that would not normally be expected.
- Command officers should be aware of topography when positioning vehicles – in this instance the roof of the car limited visibility to the top of the structure from the driver's seat (the passenger side view was unobstructed).
- Maps (including Altaris) must be continuously updated with water system repairs or upgrades, and water connections must be communicated by first due units to those incoming units. Unit officers should also use additional resources and CRM best practices to identify secondary plans for water supply in the event of unexpected changes.
- Personnel must always be alert for hidden alterations to structures. This home had a garage door with no driveway, or obvious use of vehicles, and a full size window to the side. This could easily be a camouflaged living area, which may not meet any life safety code.
- While not the norm for many structure fires, utilizing functional groups to complete goals and objectives of fire attack and rescue worked especially well. The fire was self-vented, utilities were on the exterior, and the possibility of rescues and the volume and spread of the fire required a dedicated group to knock the fire, and protect possible victims and those personnel in the rescue group.