



Montgomery County Fire and Rescue Service Post Incident Analysis

Garden Apartment Fire



301 Palmspring Drive
Gaithersburg, MD
February 8, 2011

Incident #11-00016161
1425 Hours

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Executive Summary

At 1425 hours on Tuesday, February 8, 2011, units from the 3rd and 5th Battalions were dispatched for a building fire at 502 Philmont Drive. Due to several other active incidents in the 3rd and 5th Battalions, units were not in quarters and some were at the far opposite ends of their first due areas at the time of dispatch. NIST Engine 753 had also been dispatched to the same address for a brush fire. While en route to that incident, ECC advised E753 to disregard the brush fire, and that they were being placed on another incident, being the box alarm. En route to the incident, BC705 stated that company 708 units would be out of position due to the other incidents and that the first arriving engine company should take the first due position and announce the rest of the running order from there.

E753 arrived on the scene and announced that they had a working fire. AT708 arrived shortly thereafter and requested a second alarm assignment be dispatched. E753 encountered heavy fire on side Charlie of 301 Palmspring Drive. E731 checked on the location of E708, determining E708 was a far enough distance away to change the order making E731 second due, and E708 third due. E753 notified BC705 while he was still en route of the working fire on side Charlie of 301 Palmspring Drive. BC705 advised E753 to take command and that he would be operating on his own for a while.

Chief 717 Charlie arrived on the scene and assumed the command from Engine 753, assigning E753, E731 and AT708 to the third floor for interior operations. A708's crew was assigned as the initial two-out crew on side Alpha. RS729 was assigned as the search group supervisor. AT708 reported to command that the primary search of all apartments on the fire floor was negative. BC705 was assigned as the Incident Scene Safety Officer, and reported heavy fire throughout the attic in the fire building. BC705 also reported the close proximity (50 feet) of the building at 303 Palmspring Drive, and requested crews to provide an exposure protection line for that building. BC705 also requested a crew to force and evacuate 303 Palmspring Drive.

After several minutes of interior operations, the decision was made due to fire conditions above Division Three to back all units out of the building and attack the heavy volume of fire with master streams from AT708 and T731 on side Alpha. A PAR was conducted of units that had been operating in the fire building and all personnel were accounted for via radio.

After the fire was darkened and brought under control with master streams, crews were reassigned and re-entered the structure to extinguish any remaining fire, check for extension, and perform salvage and overhaul operations in the fire building. All three floors of the fire building were checked for extension, water damage, and overhaul needs. Holes were cut in the floors of the fire building in order to relieve the water weight in the building.

Structure/Site Layout

- 301 Palmspring Drive is a garden style apartment building with an enclosed central stairwell. It was built with lightweight, wood frame construction on all three floors.
- The structure presents three floors on both sides Alpha and Charlie.
- All levels of this structure have four apartments, two on either side of the central stairwell.
- The front apartments occupy the Alpha and Delta quadrants, the rear apartments occupy the Bravo and Charlie quadrants.
- All apartments are above the ground level entrance from both sides Alpha and Charlie.
- The building sits approximately 50 feet from 303 Palmspring Drive on the Bravo/Charlie corner, and 502 Pensacola Drive on the Charlie/Delta corner.
- The building is approximately 100 feet from the main road, Muddy Branch Road.
- Hydrants utilized were located in between 301 Palmspring Drive and 502 Pensacola Drive, as well as the hydrant on side Alpha of 301 Palmspring Drive
- There is a large courtyard on side Charlie of the structure allowing access to side Charlie of 301 Palmspring Drive, side Charlie of 502 Pensacola, the Alpha/Delta corner of 303 Palmspring Drive, as well as other structures on Pensacola Drive.

Communications

As stated in the **Executive Summary**, ECC had initially dispatched E753 on a brush fire at 301 Palmspring Drive at 1422. While E753 was en route, they cancelled the brush fire and dispatched the box alarm assignment. The box alarm was dispatched at 1424 PM, the RID was dispatched at 1429, and the second alarm assignment was dispatched at 1431 hours.

ECC assigned all first alarm and RID units to 7 Charlie, and all second alarm units to 7 Delta. These talk groups were adequate for fire ground operations.

Due to several units clearing previous incidents at or near the time of dispatch, units were out of position and attempting to communicate with BC705 to be assigned to the incident. These communications occur on the fire ground operation talk group, while en route to the incident. This can, and in this case did, cause a great deal of unnecessary radio traffic while units were engaging in water supply, reconfiguring running assignments for the engines that were responding, and engaging in initial fire attack.

At some point after the dispatch of the second alarm, AT735 was replaced on the call and subsequently transferred to station 8. Command was never made aware of this change in response, and attempted to assign AT735 a task on the fire ground.

Incident Scene Operations

- E753 arrived on the scene and secured a water supply by sleeving the hydrant between 301 Palmspring Drive and 502 Philmont Drive on the Charlie/Delta corner of the building, on Philmont Drive. E753's officer gave a report of a two story garden apartment and that he had a working fire.
- AT708 arrived on scene and immediately requested a second alarm assignment.
- E753 gave numbers of '301' and a report that they had their own water supply.
- E731 broadcast the corrected address of 301 Palmspring Drive, and requested E708's location.
- E708 reported they were just passing station 8, and E731 then claimed the second due position, bumping E708 back to third due.
- E753 called BC705 and reported a working fire on side Charlie.
- BC705 informed E753 that he would have to take command of the incident and he would be alone for a few minutes. E753 acknowledged and established command.
- E753 advanced a leader line between the buildings to side Charlie of the fire building. They had been advised by occupants of the possibility of children still in the ground floor apartments. E753's crew entered the apartments on the ground floor and quickly searched, finding no occupants.

- E753's crew then retreated from the ground floor and began to attack fire from the outside on side Charlie of the building.
- E722 called out for a clarification of running assignments for the engines.
- Chief 717 Charlie arrived on the scene and assumed command from E753. E731, E753 and AT708 were assigned to work on the third floor to extinguish the fire that was now in the attic of the building.
- Rescue Squad 729 was assigned as the search group supervisor tasked with searching the fire building as soon as possible, which they acknowledged.
- BC705 was assigned as the Incident Scene Safety Officer.
- E731 called to E753 for them to charge the cross lay, which was acknowledged by E753's driver.
- Command called E753 and E731 to confirm their locations and tasks. E753 reported he was on side Charlie of the fire building.
- E708 reported they were taking the third due hydrant between 301 and 303 Palmspring Drive.
- Command assigned E728 as the RIG on side Alpha of the building.
- Command called E731 again to confirm their location and task. E731 reported they were in apartment 10 of the fire building as assigned attacking the fire.
- AT708 called command to report the primary of the third floor of the fire building was negative.
- E722 was assigned to division three with E731 and AT708 to work on extinguishment of the fire.
- E722 reported that E731's pump operator was not at the panel and they needed someone to charge their attack line.
- Safety called command to report three stories in the rear with heavy fire throughout and the exposure building of 303 Palmspring approximately 50 feet away. Safety requested a crew with a line to protect the exposure building.
- Command requested the evacuation tone be sounded and to have AT708 set up for defensive operations. Command advised that they would be transitioning to a defensive attack, ECC sounded the evacuation tone and announced that all units were to evacuate the building.
- Safety called command to request a crew to evacuate the exposure building, 303 Palmspring Drive.

- An unknown unit called command to report that a primary of the fire apartment had been completed and was negative.
- E734 was assigned to evacuate 303 Palmspring Drive.
- E731 called out to have their line shut down, but at the time was unreadable on the fireground. The line had burned in half.
- Command could not confirm that all units had evacuated the buildings, and the evacuation tone was sounded a second time, and the announcement made to evacuate 301 and 303 Palmspring.
- Command called E731 for a PAR, with no answer.
- E722 reported that they were on side Alpha with all accounted for after being called by command for PAR.
- AT708 reported that their crew was in the bucket of the tower commencing master stream operations after being called by command for a PAR.
- RS729 reported that they were out of the building on side Alpha and all accounted for after being called by command for a PAR.
- E731 was called again by command to confirm they were out of the building, with no answer. Command repeated calling E731 to confirm they were out of the building, again with no answer. Command called E731 a third time to confirm they were out of the building, and finally received a response that E731 was out of the building.
- Division Charlie called command to report he had two foam lines on the exposure building and a portable monitor in operation on the fire building. He required no further companies to his location.
- AT708 called command reporting they were commencing master stream operations.
- Command called E731 and assigned them as the Alpha division supervisor with E731, AT708, E722, T731.
- E734 reported to command that 303 Palmspring had been emptied, with every apartment being forced and searched.
- Command called E753 several times for their location and task. After calling them four times they acknowledged they were on side Charlie. Command informed them they were fine there and that they would be reporting to BC705 who was the division Charlie supervisor.
- RIG supervisor called command to advise RS717 had arrived with two personnel and they were at the Alpha/Bravo corner of the building.

- Charlie division supervisor called to advise master streams were shut down on side Charlie and they could mount an interior attack on the top floor.
- Alpha division supervisor called and advised that the bulk of the fire had been knocked and it would be a good time to change tactics to an interior mop-up.
- Command called E703, E735, AT735 (replaced on call and transferring to station 34), AT723 and advised them to assemble on side Alpha, meet BC702 and be prepared to go to work on the third floor with BC702 as the division supervisor.
- E722 and RS729 were added to the complement reporting to division three.
- Command advised AT708 to shut off the master stream right away so that crews could enter and work on division three.
- Command called division three to confirm his units and that we had moved back to an offensive operation, and that RS729 was performing a secondary search of the fire building.
- Command assigned E708 and AT708 to the second floor with E708 as the division two supervisor to check for extension and fire travel. The objective was to search for, contain, and extinguish any extension.
- Charlie division advised that E753, AT734 could be reassigned to other work on the incident.
- Command assigned E731, T731 to the first floor, E731 as the division one supervisor to search for, confine, and extinguish any extension.
- Charlie division supervisor called to advise that the bulk of the remaining fire above was in the bravo quadrant of the building. This was relayed to the division three supervisor.
- Division three called to advise that E722 had a line on the bravo quadrant and was working the remaining fire.
- SA700 confirmed as the ISSO, and asked for evaluation of all three floors of the interior of the building.
- Division one supervisor advised they had all fire extension controlled on division one.
- Command confirmed with the search group supervisor that the secondary search of the entire building, #301, had been completed.
- Division three supervisor advised he had the bulk of the fire on the third floor knocked and they were hitting hot spots.

- Safety advised of collapse issue on bravo and delta ends of the building from the gable ends of the building being compromised. Areas had been taped off and an announcement was made concerning the potential for collapse.
- Division three advised that electric had not been controlled in the building and there was no gas in the building. Command requested the electric company, and advised of fire coming from the roof on the alpha/delta corner.
- Division three requested SA700 to the third floor with a meter to determine if there was still and IDLH present.
- Division one advised that he was ok for resources with one crew with some hooks and a handline.

At this point in the incident, major operations were wound down, and units were cycled through rehab at CT708. After all fire was extinguished, units returned to the fire floor to cut holes in the floor to release the large volume of water that had collected due to master stream operations. Division three continued to check for and extinguish hot spots on the fire floor. Command conducted a PAR on the fire ground, with all units accounted for and either in rehab or working. Investigators on the scene operated on side Charlie while units cycled through rehab. After the investigators finished their operations, E728 and AT708 went through division three with a CAFS handline in order to ensure all hot spots had been extinguished.

Accountability

- Accountability was maintained throughout the incident through the use of an Incident Management sheet, handled by BC703 in the command post. A PAR was conducted after the evacuation of the fire building, and upon the completion of major operations. No further PAR was conducted or deemed necessary.

Staging

- Second Alarm units were assigned to the tactical talk group 7 Delta. E703 assumed the role of the Staging Manager, and advised units to stage in the 400 block of Muddy Branch Road. Units were pulled from the Staging area and utilized on the fire ground as needed.

Support

- The PIO (Captain Garcia) was on the scene to handle the media.
- CT708 was on the scene to assist with rehab
- The Red Cross was on the scene to assist the occupants of the structure displaced by the incident.

Life Safety Systems

- Alarm Bells were heard ringing in the fire building.
- Units that operated to evacuate 303 Palmspring were told to utilize the fire alarm system to notify occupants.
- While there were sprinkler systems present in the structure, the bulk of the fire was in the attic space, which is not sprinklered.

Fire Cause and Origin Investigation

- Fire investigators arrived on the scene and conducted their investigation. It was determined that the cause of the fire was improperly discarded smoking material on the ground level. This, in turn, caused a brush fire, which then ignited the siding of the building. The fire traveled up the siding on side Charlie and entered the attic space. The damage was estimated at \$1M to the structure and \$600K to the contents.

Lessons Learned

Communications:

Dispatch and response was, at the very least, hectic. Several units were clearing other incidents and bidding to respond on the fire. This placed several of the companies out of their normal running order to this address, and caused some confusion in the initial stages of the incident. It is the opinion of this command officer that the current policy of having units switch to the fire ground operations talk group to bid on an incident should be examined and possibly revised.

AT735 was initially dispatched on the second alarm assignment. After other units cleared their previous incidents, AT735 was taken off the second alarm and sent on a transfer assignment. Command was never informed of this change and attempted to assign AT735 to a task on the fire ground.

There were instances on the fire ground during the transition from an offensive interior attack to a defensive exterior attack, that units did not answer their radio. At one point, command had called a unit four times with no response and was considering declaring a MAYDAY in order to find that unit. There was heavy fire involvement in the attic area with collapse of the roof into the third floor. Units must maintain awareness of their radio communications and either answer command when contacted or have another unit relay a message that they are not in trouble.

Fire Ground Operations:

While the initial phase of the fire ground operation was quite chaotic, and somewhat confusing with the apparatus arriving out of their normal response order, operations were commenced and carried out in a coordinated and organized fashion. Units recovered from the initial shock of the out of order response and arrival and the fire was brought under control and extinguished in a timely fashion.

Engine 753 was the first arriving engine company, having been dispatched initially to the area for a brush fire. Engine 753 arrived and announced that they had a 'working fire' in a two story garden apartment. While this gives responding units the idea of having a working fire, it does not paint an accurate picture of the scene. Section 4.IV.b of the SOP for SSFO states:

'The first arriving unit will give an IOSR, including:

1. the arrival side of the building;
2. the number of stories;
3. the type of its occupancy;
4. conditions evident on arrival, with associated geographic location, using *Incident Command System* terminology;

5. a request for additional resources (example: a call for the RID); and
6. if deviating from the SOP, designating other unit assignments.¹

Command

As the incident quickly became a large scale fire, command needed to build out the team in the ICP. Assigning the next arriving command officer to the role of Safety, while policy, certainly needs to be carefully considered if the event is large in scale.

Enignes	Special Services	EMS & Support	Command	FM
E753	AT708	A708	BC703, 705, 702	FM51, 52
E731	AT703	A722	C717C	FM67
E708	RS729	M708B (RID)	DC700	
E728	AT734 (RID)	M729 (2 nd)	U1, 2, 3, 100	
E722	RS717 (RID)	CT708	U121, U131	
E703 (2 nd)	AT723 (2 nd)			
E734 (2 nd)	AT735 (2 nd) ²			
E735 (2 nd)	T731 (2 nd)			
E733 (2 nd)				

Staffing:

Four person staffing on this incident had a positive impact on the outcome. Had there not been four person staffing on the fire apparatus involved, several key fire ground tasks would have been delayed, possibly causing more significant fire damage than what was done.

¹ Montgomery County Fire and Rescue Service, Policy 24-07 AMII, SOP for Safe Structural Firefighting Operations

² AT735 was replaced on the 2nd Alarm by T731. AT735 then transferred to Fire Station 8.

Unit Positioning

