



MONTGOMERY COUNTY FIRE/RESCUE
SERVICE
POST INCIDENT ANALYSIS



**2-Alarm Garden Style Apartment Fire
Box Area 25-08
14128 Whispering Pines Court
September 12, 2014
Incident #14-0104672**

Written By: Battalion Chief Frank Doyle

TABLE OF CONTENTS

- [Incident Overview](#)
- [Building Structure/Site Layout](#)
- [Fire Code History](#)
- [Communications](#)
- [Pre-emergency Planning](#)
- [Staging](#)
- [Support Functions](#)
- [Safety Considerations](#)
- [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 September 12, 2014, at 1230 hours, Montgomery County Fire and Rescue units responded to 14128 Whispering Pines Court, Aspen Hill, Maryland for a report of an apartment fire. While units were responding the Mobile Data Computers were updated with information reporting smoke coming out of the vent in the bathroom in Apartment 34. Additional updates reported the caller had smelled smoke since yesterday and when she turned on her bathroom fan, smoke started coming out of the vents. Weather at the time of the incident was dry and clear with temperature in the mid 70's. Winds were light and variable from the north at 5 to 10 miles per hour. The weather was not a factor in fire behavior or the outcome of the incident.



Engine 740 initial on-scene report (IOSR) from the Alpha side of the structure described a three story garden style apartment with smoke showing from the roof. Engine 740 requested a Rapid Intervention Dispatch, a Task Force, and established command in the attack mode. Engine 740 advised they were stretching a three hundred foot 1 ¾" hand line. Battalion Chief 704 arrived on scene shortly after Engine 740 and assumed Level 2 Command, on the Alpha Side, in the Battalion 704 vehicle, and activated the green command light. Battalion 704 confirmed the request for the Task Force and requested the Task Force stage at Bel Pre Road and Connecticut Avenue. At this time gray smoke under pressure was showing from the Charlie/Delta quadrant of the roof only. No smoke was evident from the windows

or in the open center stairwell of the apartment building. The fire occurred in Station 25's first due area, however, the engine and truck from that station were not on the initial dispatch due to previous calls for service. Truck 725 was added to the call as the second due truck while other units were enroute, having cleared their previous incident. Paramedic Engine 725 was eventually dispatched on the Task Force after clearing a previous medical call.

Command ordered Engine 740, Paramedic Engine 718, and Truck 725 to Division 3 with Engine 740 as the Division Supervisor. Engine 740 reported to command smoke in

Apartment 34 and the belief that the fire was in the cockloft. Command assigned the objective of conducting a primary search of Apartment 34 and opening the cockloft to find and extinguish the fire. Paramedic Engine 723 was assigned to establish the Rapid Intervention Crew on Side Alpha. At that moment, Truck 725 advised command that a truck from the Rapid Intervention Dispatch or Task Force would be required on Side Alpha. Due to the change of dispatched trucks enroute and a missed communication both dispatched trucks had arrived on side Charlie of the structure. Tower 718 was assigned by command to ensure ladders were placed on all sides of the structure. Paramedic Engine 724, the fifth due engine, was standing by for orders next to the Command Post. A face to face communication order was given to Paramedic Engine 724 to assist placing ladders on Side Alpha due to both trucks arriving on Side Charlie. Command advised all units that there was no aerial access to side Alpha of the building. Rescue Squad 742 was assigned to complete a primary search on the remaining apartments on the top floor of the structure. Chief 705-Charlie and the Duty Operations Chief 700 reported to the Command Post and operated as part of the Incident Management Team.

An update was requested by Command with Division 3 reporting they were still trying to locate the seat of the fire and open the cockloft. Command copied the message and advised Division 3 that Battalion Chief 703 was on the way to the third floor to assume the Division 3 Supervisor role. With the report of difficulty locating the fire and no visible rescues on Side Alpha Command reassigned Paramedic Engine 724 to check the terrace level for smoke or fire. Tower 718 crew was assigned to check the second floor for smoke or fire. Chief 705 arrived on scene and gave a side Charlie report of three stories in the rear with nothing evident below the roof. Chief 705 was assigned the Incident Scene Safety Officer duties. Safety 700 arrived on scene and reported to the Command Post. The Incident Scene Safety Officer duties were reassigned to Safety 700 and Chief 705 was assigned to the Division 2 as the Supervisor with Tower 718. Paramedic Engine 723 was assigned the Rapid Intervention Group Supervisor with Rescue Squad 703, Tower 723, and Medic 742F.

Division 3 located the fire in the cockloft area and requested an attic ladder and a Truck company to report to the roof. Command queried Truck 725 driver if there was aerial access on Side Charlie and Truck 725 reported that there was none. Truck 725 was assigned to place ground ladders to the roof. Chief 705 reported to Command there was fire in walls on Division 2 extending vertically in the pipe chase.



Paramedic Engine 724 simultaneously reported fire in Apartment 14 on the terrace level. Tower 24 was redirected from staging to immediately report to the roof and perform vertical ventilation as requested by Division 3. Paramedic Engine 725 was requested to stretch a hand line to Division 2 to assist Tower 718 and Chief 705. With the escalation of the incident and fire now located on three floors of the apartment building, Command requested a Second Alarm.



Division 3 reported to Command that fire was located in Apartment 34 and 33 and that two lines were working to extinguish fire in the walls and ceiling. Command announced to all units operating, that the fire attack was still in the offensive mode, and there was fire now reported on all three floors of the structure with units operating. Engine 705 had stretched a hand line to Division 3 and reported to Apartment 32 to check for extension. Tower 718 reported from Division 2, that due to a delay in the Task Force Units arrival that a hand line had been secured from Engine 705 on Side Charlie and suppression efforts were in process on Division 2. Command attempted to contact Chief 705 as Division 2 via radio. Chief 705 reported he was unaware of his change in assignment from Incident Scene Safety Officer to Division 2. Command clarified the order and assigned Chief 705 to Division 2 Supervisor with Tower 718, Paramedic Engine 725, and Paramedic Engine 721 and received an acknowledgement from Chief 705.

Conditions continued to deteriorate on Division 3 and Division 2. A progress report was requested from Tower 724 on roof conditions. Aerial Tower 724 reported they were flagged down by Paramedic Engine 724 on the first floor to assist with truck work and had not made the roof yet. Tower 724 was ordered to report to the roof immediately and open the roof in support of the fire attack. The attack lines to Division 2 from Paramedic Engine 725 and Paramedic Engine 721 were delayed due to the long leader line evolutions required to place the lines in service. Tower 718 was operating alone for some time on Division 2.

At this time there were five hand lines operating in the fire building. Rescue Squad 742 confirmed "All Clear" for the entire structure after a systematic search had been conducted. Rescue Squad 703 confirmed that both gas and electric were secured for the entire building. The first alarm crews had depleted their air supplies and crews were being rotated out with relief from the second alarm units. A Rehabilitation Group was established with Emergency Medical Services 701 (EMS701) as the group supervisor

with Medic 742 Bravo and Ambulance 721. All exiting personnel were ordered to report to the Rehabilitation Group prior to being reassigned.



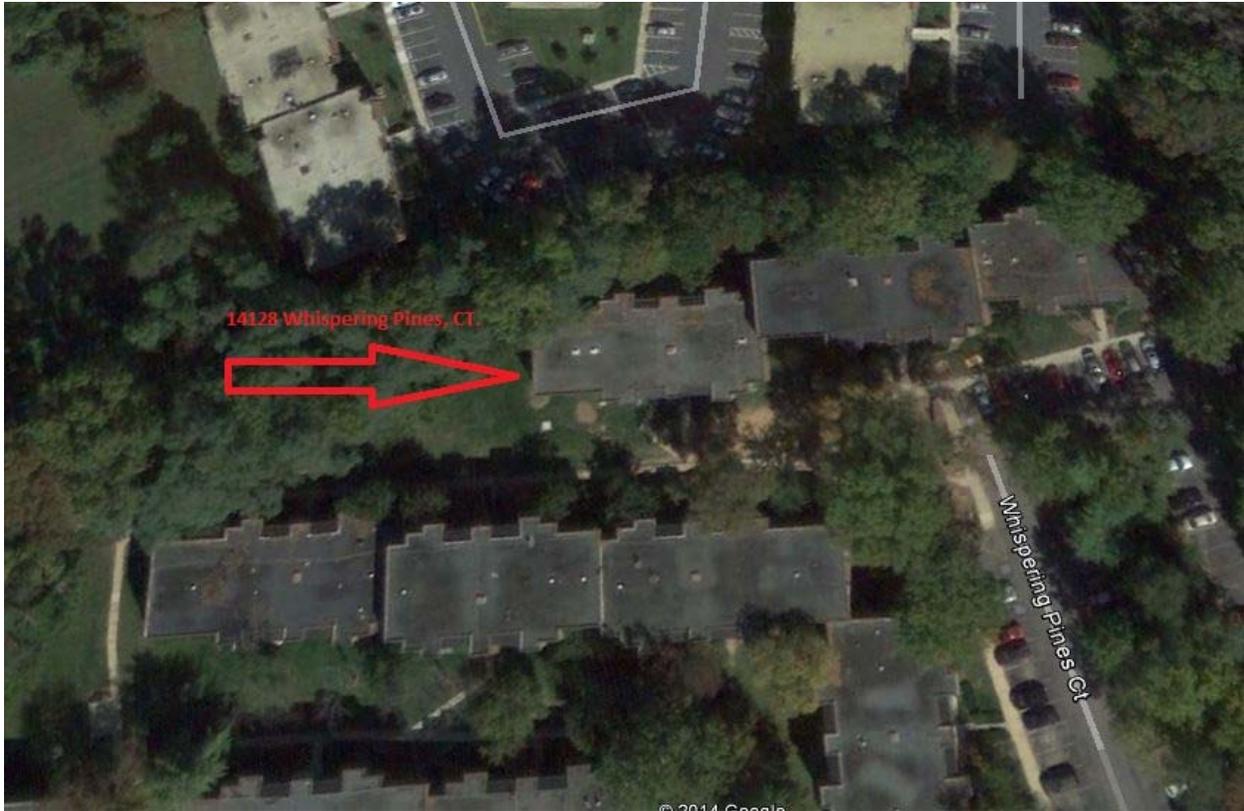
Following the Roof Group's successful ventilation of the roof, the fire was extinguished and placed under control. A Personnel Accountability Report was completed for all units operating on the fire ground. A firefighter from the First Alarm unit felt weak was seen by the Rehabilitation Group for evaluation. This firefighter, and one additional firefighter, was transported to a local hospital for an evaluation of medical conditions.

The fire was declared under control and the incident was systematically downsized. Fire Code Compliance evaluated the fire building and exposures and posted seven of the apartments as unsafe for occupation. The Fire Explosives and Investigation Group investigated and determined the cause to be accidental due to plumbers sweating pipes in terrace level Apartment 13.

Building Structure/Site Layout

14128 Whispering Pines Court is a three story garden apartment building containing twelve individual apartments. Four apartments were located on each floor of the building with all entrances coming from the main center open stairwell accessed only from the Alpha side. Charlie side access to the structure was only through sliding porch doors on the Charlie side terrace level apartments. The exterior dimensions of the Type III Ordinary Constructed building are 40 x 100 feet with an overall square footage approximating 12,000 square feet. The individual apartments range in square footage from 744 to 1311 square feet.

14128 Whispering Pines Court was connected to a single exposure 14120 Whispering Pines Court, of similar size and construction, by a 26 foot portion of the Side Delta Masonry wall. The building was protected by a local unmonitored alarm system. There was no sprinkler or standpipe present in the structure. Battery operated smoke detectors were present in the individual apartments. The smoke was detected by the occupant before the fire alarm activated.



Apparatus access to the scene was limited by the position of the building at the end of a Court. There was no direct access on the Alpha side for aerial apparatus. The possibility to place an aerial on the Alpha side on the soft ground was prevented by the placement of decorative landscaping boulders. The closest apparatus access to Side Charlie was from the Strathmore House Apartment complex accessed from Bel Pre Road. Units had to cut down a wood fence and traverse a short downhill distance of sixty feet to access the fire building. There was aerial access on the Charlie side in the event a master stream was required but the reach of the closest aerial tower was approximately ten feet short of the roof edge. The first due engine on the Alpha Side with optimal position, was still one hundred and fifty feet from the Alpha Side entrance.

Fire Code History

A review of the past and current fire code requirements for the structure revealed no recent code compliance history for this garden style apartment complex. The structure is a non-sprinklered building with operational battery powered smoke detectors on each level. The smoke detectors activated after the initial discovery of smoke by the reporting occupant.

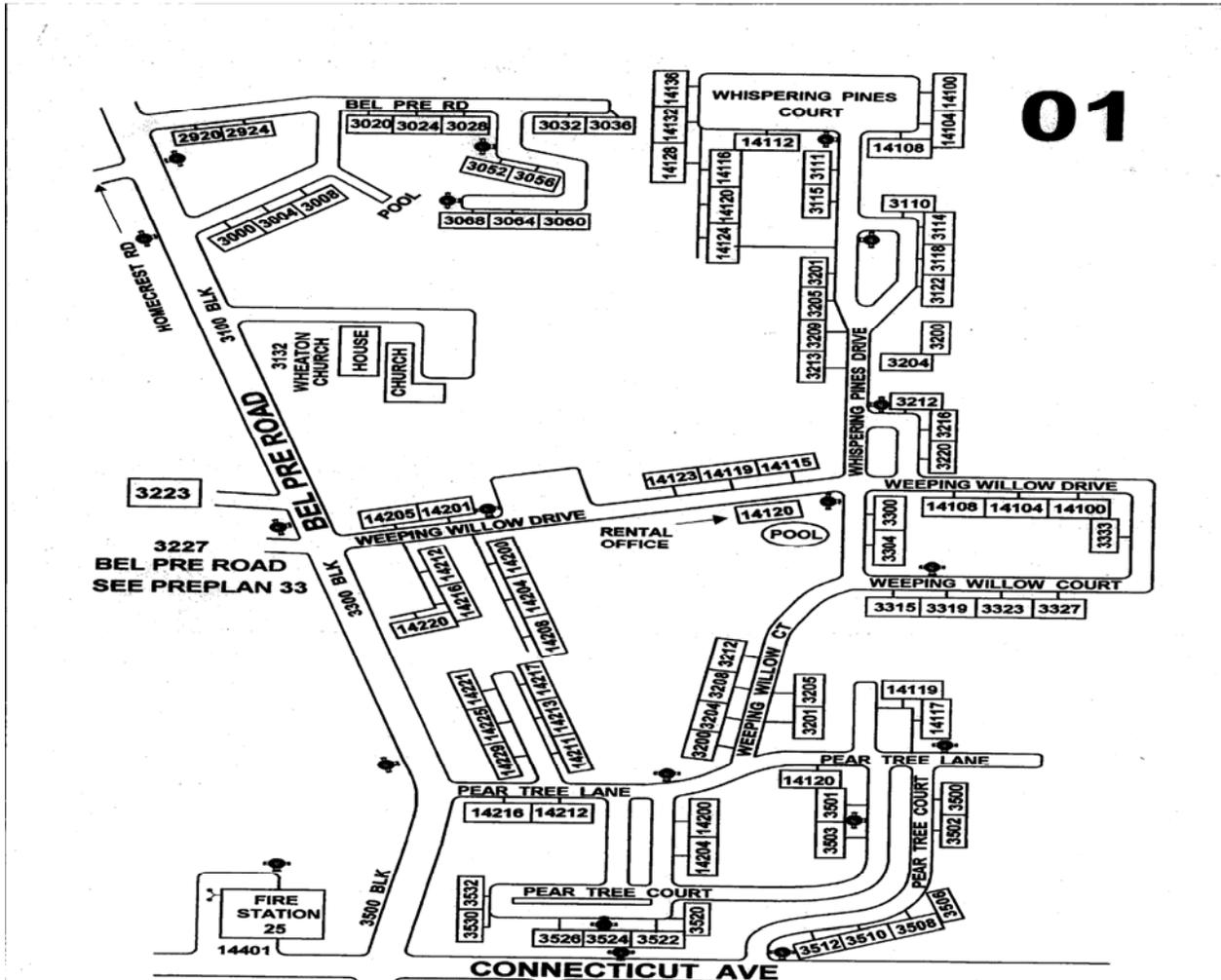
Communications

The incident was dispatched as an Apartment Fire on both the first and second vocal. Updates were provided via Mobile Data Computer reporting smoke from the bathroom vents on the third floor while units were enroute. The incident was assigned to the 7-Charlie talk group with the Task Force and Second Alarm units assigned to 7-Delta. The radio reception was good and the Vehicle Repeater System (VRS) was engaged but not used.

The rapid escalation of the incident required all units on the Task Force and Second Alarm to switch to 7-Charlie for streamlined communications. Command did not specifically ask for, or receive, acknowledgement on some communications leading to confusion of assignments by a crew. Units operated with discipline by communicating needs to command through their respective Division Supervisors. Timely updates were provided to ECC and units operating on scene by command regarding the status of the incident.

Pre-emergency Planning

There is no pre-fire plan for the structure other than the current "box map" prepared by Fire Station 25's personnel. The map was available in all responding fire apparatus and units with operating Mobile Data Computers. The map was not accessed or required for use by Incident Commander.



Staging

The units dispatched on the Task Force were assigned to operate on 7-Delta and ordered to stage at the intersection of Bel Pre Road and Connecticut Avenue by Command. Those units were called to the scene prior to all Task Force units arriving in staging. With the rapid escalation of the incident, the Second Alarm units were directed to the scene, bypassing staging. No additional units were assigned to Staging.

Support Functions

A Rehabilitation Group was initiated early into the incident on the Alpha Side near the Command Post. EMS701 coordinated with Medic 742 Foxtrot and Ambulance 721 to ensure all personnel rotated and cleared Rehab. Mobile Air Unit 716 (MAU716) and Canteen 740 worked in unison with the Rehabilitation Group to ensure personnel were hydrated and Self Contained Breathing Apparatus (SCBA) cylinders were available for service. Two firefighters were treated and transported from the Rehabilitation Group to

the emergency room for further evaluation of medical conditions that did not resolve with rehabilitation on scene. The Rehabilitation Group effectively managed the medical transports with available resources. No additional resources were required.

Interactions with outside agencies were properly coordinated (i.e. MCPD, Red Cross, Power, and Gas Company). Fire Code Compliance posted seven apartments as unfit for occupation. The building management company was working with the utilities to return service to the five less affected apartments in the building.

Safety Considerations

Engine 740 did not announce a Stand-by Crew on arrival. Paramedic Engine 723 was assigned as the Rapid Intervention Crew (RIC) unit by Command and transitioned to the Rapid Intervention Group (RIG) Supervisor with Rescue Squad 703, Aerial Tower 723 and Medic 742 Bravo; the Rapid Intervention Group (RIG) units were situated on Side Alpha in proximately to the main building entrance.

Initially, Chief 705 was assigned the Incident Scene Safety Officer (ISSO) functions; Command later transferred that duty to Safety 700. The Incident Scene Safety Officer ensured used of Self Contained Breathing Apparatus (SCBA) until the completion of overhaul and all units exited the building.

Accountability

Crews were accounted for utilizing the Incident Tactical Worksheet and the Daily Line-up form carried in the Battalion 704 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.

Resources

1st Alarm

Engine 740	Aerial Tower 718	Medic 742B
Paramedic Engine 718	Truck 725	Battalion Chief 704
Paramedic Engine 723	Rescue Squad 742B	Battalion Chief 701
Paramedic Engine 705		
Paramedic Engine 724		

RID

Aerial Tower 723	Medic 742F
Rescue Squad 703	

Task Force

Paramedic Engine 725 Aerial Tower 724
Paramedic Engine 721

2nd Alarm

Paramedic Engine 703B Truck 716 Ambulance 721
Engine 733 Truck 715 Medic 723
Paramedic Engine 704
Paramedic Engine 728

Other

Duty Chief 700 Safety 700
Chief 705 Emergency Medical Services 701
Chief 705 Charlie Inspector 710
Mobile Air Unit 716 Canteen 740
Fire Explosives Investigations 757
Fire Explosives Investigations 758
Fire Explosives Investigations 763

Lessons Learned

An active fire in a Garden Style apartment involving multiple floors tax's the initial alarm units to effectively address all the identified duties.

- There must be continuity in designating "Two-Out". If the "Known Life Hazard" threshold is met, entry can be made prior to arrival of a "Standby Team". But that decision must be announced over the radio for situational awareness. If "Two-Out" is required, the "Standby Team" must meet requirements and be ready before crews enter the Immediately Dangerous to Health (IDLH) area.
- Units operating at a fire in a building containing multiple floors must always check the lowest level of the structure for smoke and fire. The fire in this structure was reported by an occupant on the third floor after noting smoke in her bathroom vents. The fire began on the first floor. All the first arriving units immediately reported to the fire floor by passing two floors of involved apartments. History demonstrates fire in this type of construction readily spreads vertically through pipe chases of stacked apartments.
- Command should make an explicit description of floor designations. (ie. "Starting at the top, we will have Divisions 3, 2, and 1"). This was done by Command shortly into the incident, but not before some units were operating out of position due to confusion of the geography of the building.
- All units operating on the fire ground should carry some sort of hand tools. Crews were operating in seven different apartments that had some fire or extension. In a complex fire involving multiple occupancies every operating engine may not have a truck company to immediately support their operation. All units responding on additional alarms may be called upon to operate outside of their normal unit responsibilities. Division Supervisors, once assigned, shall identify this need and communicate requirements prior to unit commitment.
- Units must practice operational discipline when on complex incidents. It is important to maintain your assignment and report timely to your assigned area. The ability to maintain personnel and unit accountability on large incidents mandates this posture. Units with assigned positions were side tracked from their primary assignments to assist were they thought it was necessary. This delay impacted fire control and overall safety and accountability of personnel. If a unit feels a critical function must be completed the information must be communicated to command for assignment.

- Command did not specifically ask for or receive acknowledgement on some communications leading to confusion of assignments by a crew. It is incumbent upon all to demonstrate radio discipline in both receiving and acknowledging radio transmissions. During an active event there is significant radio congestion, however, failure to acknowledge messages leads to confusion and accountability concerns.
- All exposures must be checked for not only smoke and fire but other possible products of combustion. The fire did not impinge or encroach upon the Delta side exposure wall. No smoke was evident in any of the exposure. Late into the incident an occupant on the top floor of the exposure returned home and found their Carbon Monoxide (CO) alarm going off. Investigation revealed elevated levels of Carbon Monoxide (CO) in a 3rd floor apartment. This was quickly ventilated with no additional issues.
- All personnel must ensure their continued health and readiness through personal fitness, healthy practices, and hydration. The additional stress due to overhaul in full Personal Protective Equipment (PPE) including Self Contained Breathing Apparatus (SCBA) puts more demand on individuals.

Overall Analysis of Incident

The successful outcome of this incident was driven by the initial actions of the first arriving units to conduct a risk analysis and rapidly place in-service multiple hand lines on multiple effected floors. The need to rapidly locate fire and cut off extension to uninvolved portions of the building was conducted by all assigned crews. The first alarm units operated decisively to limit the spread and extinguish the bulk of fire. The first alarm units demonstrated discipline and comprehension of ventilation flow path concerns. Windows and openings in the structure were not broken or opened until appropriate fire control was established limiting fire grow and spread. Crews effectively executed basic skills to accomplish their tactical objectives.