



**2<sup>nd</sup> Alarm Residential Apartment Fire**  
**January 8, 2014**  
**18241 Lost Knife Circle**  
**FS8's area**



- One civilian fatality
- Six injured civilians
- Fire on two floors and roof area
- Two apartments involved, 12 apartments affected.



## Post Incident Analysis for 18241 Lost Knife Circle

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## **Post Incident Analysis for 18241 Lost Knife Circle** **Executive Summary**

At 1605 on January 8, 2014, units were dispatched for a structure fire at 18241 Lost Knife Circle in Company 8's area. Units arrived to find heavy fire showing from two floors and extending to the roof area of a three story residential garden apartment building. Units were also advised of a child still inside the building and several people hanging from windows. The building was occupied at the time of the fire and required the quick and efficient operations of fire crews to successfully complete several rescues.

The fire had advanced quickly when the occupants of the fire apartment tried to fight the fire and the patio slider door failed, allowing unimpeded air flow to fuel the fire. Due to the large amount of fire and the known, the decision was made to hit the fire from Side Charlie through the patio for a quick knock down while crews searched the three floors for victims. Crews split to complete various tasks such as searches, several window rescues via ladder, and extinguishing the fire. The decision to split crews saved lives and cut crucial time to extinguish the fire; this would not have been possible if the crews did not have four or five personnel on their units.

There was one civilian fire fatality, and six civilian injuries with four of the civilians transported to the hospital; all others were treated on the scene and refused transport.

The incident required two alarms and specials due to the following:

- Complexity – Large amount of fire and location in the apartment complex with limited apparatus access.
- Exposures – Potential vertical and lateral spread to adjacent exposures and/or apartments
- Rescues – four apartments per floor and at the time of the fire seven of the twelve apartments were occupied.

The probable cause of the fire according to FEI was a faulty appliance in apartment #202, but at this time the cause is formally listed as “undetermined”.

### Incident Statistics:

- 90 Personnel including:
  - 9 Engines (36 personnel)
  - 6 Truck Company's (20 personnel)
  - 3 Rescue Squads (10 personnel)
  - 2 BLS Units (4 personnel)
  - 2 ALS Units (4 personnel)
  - 9 Chief Officers (9 personnel)
  - 3 Support (7 personnel)
- \$1,000,000 loss to main structure, \$400,00 loss to contents



## Post Incident Analysis for 18241 Lost Knife Circle

### Site & Structure Layout

- Fire building identified with black arrow and pointing to the fire apartment.
- Five closest fire hydrants are identified with red dots.
- Cider Mill Apartments were constructed in 1972 as residential apartments and have changed owners a few times but remained rental apartments.



- The complex covers 13 acres and has 67 separate buildings in one, two, and three building clusters.
- The buildings are all three stories with three or four apartments per floor. The building involved was the third in a row of three (18237, 18239, & 18241)
- The structure is type 2 construction with mansard type roofs that cover a concrete slab roof.
- There are domestic sprinkler systems in the common utility and storage rooms, with no connections or pumps.
- There are interconnected fire alarm systems with one or two pull stations per building and not monitored.
- The building has a common boiler unit and HVAC unit. The building is supplied by natural gas also supplied by a common feed.
- There is one open stairwell per building with fire extinguishers on every other floor.



08-007 / / / /  
18200-18400 Blk  
Lost Knife Cir  
REV. 08/17/10  
LT RJ COZZA



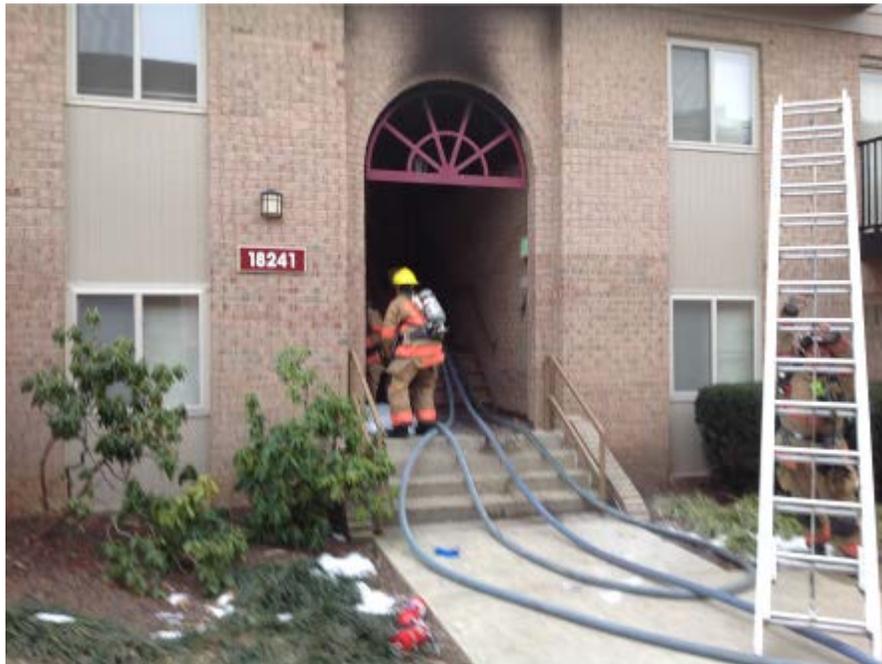


## Post Incident Analysis for 18241 Lost Knife Circle



View of Side Charlie just after initial exterior knock

- Each apartment has a 1 ½ hour fire separation from the stairwell and two hour rated doors.
- Each apartment has smoke detectors with battery back-ups. The detectors are local units and are not connected to the fire alarm system.



View of Side Alpha



## Post Incident Analysis for 18241 Lost Knife Circle

### Fire Code History

- Most of the violations in the past were limited to access issues, general house keeping, and recertification issues.
- The last record of a fire inspection was April of 2007 with minor issues to the fire alarm system and a sprinkler head in the storage room.

### Unit Breakdown

#### Box Alarm

Paramedic Engine 708  
Engine 753  
Paramedic Engine 734  
Paramedic Engine 729  
Paramedic Engine 722

Paramedic Tower 708  
Tower 753  
Rescue Squad 729

Ambulance 728  
Battalion 703  
Battalion 704

#### Rapid Intervention Dispatch

Tower 723  
Rescue Squad 703

Medic 729

#### 2<sup>nd</sup> Alarm

Paramedic Engine 728  
Paramedic Engine 703  
Paramedic Engine 735  
Paramedic Engine 721

Truck 740  
Truck 731  
Rescue Squad 729

Medic 735

#### Special Alarms

Tower 703  
Command Post 727  
Medical Ambulance Bus 722

Air 733  
EMS700  
Canteen 708

#### Chief Officers

Chief 700  
Communications Chief 700  
Special Operations Battalion 700  
Chief 717 Delta

Duty Chief 700  
Volunteer Chief 700

Operations Chief 700  
Executive Chief 700  
Chief 717 Bravo

#### Fire Marshals

FM4, FM756, FM759, FM767, FM754



## Post Incident Analysis for 18241 Lost Knife Circle

### Initial On-Scene Report and Command

- ECC transmitted to all units on 7 Charlie: "There is a child still in the building" this was followed up by: "child is on the second floor"
- Paramedic Engine 708 arrived on Side Alpha with smoke showing, their own hydrant, and requested a second alarm.
- Engine 753 arrived on Side Charlie with fire showing, their own hydrant and reported occupants in the windows needing assistance.
- Executive Chief 700 reported occupants on Side Alpha 3<sup>rd</sup> floor have jumped and more ready to jump with heavy smoke.
- Duty Chief 700 arrived on Side Charlie and established Level 2 Command.
- Two rescues were made by ground ladder (one each from Sides Alpha & Charlie), with reports that there were still two people trapped inside on 2<sup>nd</sup> floor.

### Communications

- Communications dispatched the incident on 7 Alpha.
- Units responded on 7 Bravo.
- Communications assigned the event to incident talk group 7 Charlie Incident 10 through 7 Foxtrot Announce 10.
- Most of the communications for the incident were on 7 Charlie.
- The 2<sup>nd</sup> alarm units responded and were level two staged on 7 Delta.
- 7 Echo and 7 Foxtrot were never used.
- VRS was not needed, but was activated by both Battalion Chiefs

### Initial On-Scene Operations

Due to units clearing other calls, some units arrived out of order and the standard operating procedures for safe fire fighting operations were not followed for positioning. The first and second arriving engines each established their own hydrants on Side Charlie and Alpha respectively. The first hand-line was directed by Command to Side Charlie to attack the fire on the 2<sup>nd</sup> and 3<sup>rd</sup> floor from the exterior. The second hand-line was sent to Side Alpha to protect the interior stairs and move in once the fire was knocked down on Side Charlie

- The first and second trucks were on Side Alpha and Charlie but both were delayed due to distance and clearing from other events.
- A third water source was established by Paramedic Engine 722, also taking their own hydrant.

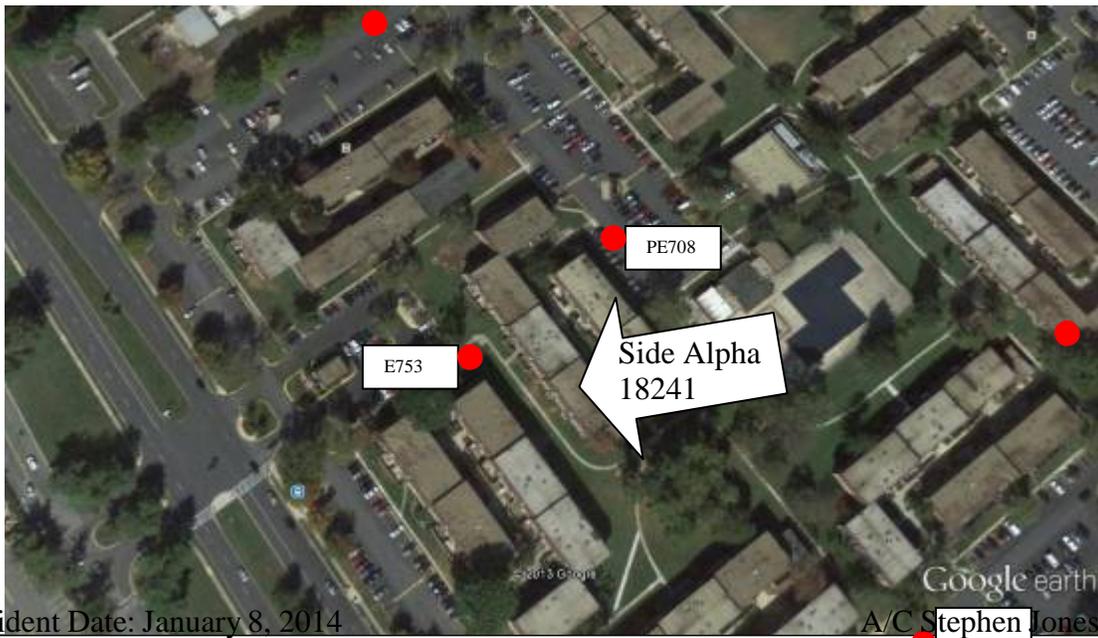


## Post Incident Analysis for 18241 Lost Knife Circle

- The following divisions or groups were established:
  - Command (Duty Chief) with Fire Chief, Operations Chief and Special Operation Battalion
  - Division 2 (Battalion 703) with Paramedic Engine 708, Engine 753, Paramedic Engine 734, & Paramedic Tower 708
  - Division 3 (Communication Battalion) with Paramedic Engine 722, Paramedic Engine 729, & Tower 735
  - Rescue Group (Rescue Squad 729) with Rescue Squad 703
  - Roof Division (Paramedic Engine 728) with Truck 731
  - Safety (Safety 700) with Chief 717 Delta
  - Exposure Delta (Battalion 704) with Paramedic Engine 703 & Truck 740
  - Staging Group (Paramedic Engine 735)
  - Rapid Intervention Group (Tower 723) with Rescue Squad 703 & Medic 735 (both units used for initial operations.)
  - Rehab (EMS703) with Ambulance 728, Ambulance 732, & Canteen 708
- The initial incident objectives followed the RECEO (Rescue, Exposure, Confinement, Extension, and Overhaul) plan. The first two elements were done in unison and quickly followed up by the remaining three objectives.
- The units reported to their groups or divisions quickly which helped to provided a quick knock down of the fire and good systematic searches of the fire floor and floor above.

### Water Supply

- There were three hydrants used for this fire. The three hydrants are all on 8" private mains for the apartment complex. The complex is supplied by two mains, one 20" on Lost Knife Cir and one 36" on Mid-county Highway.



Incident Date: January 8, 2014



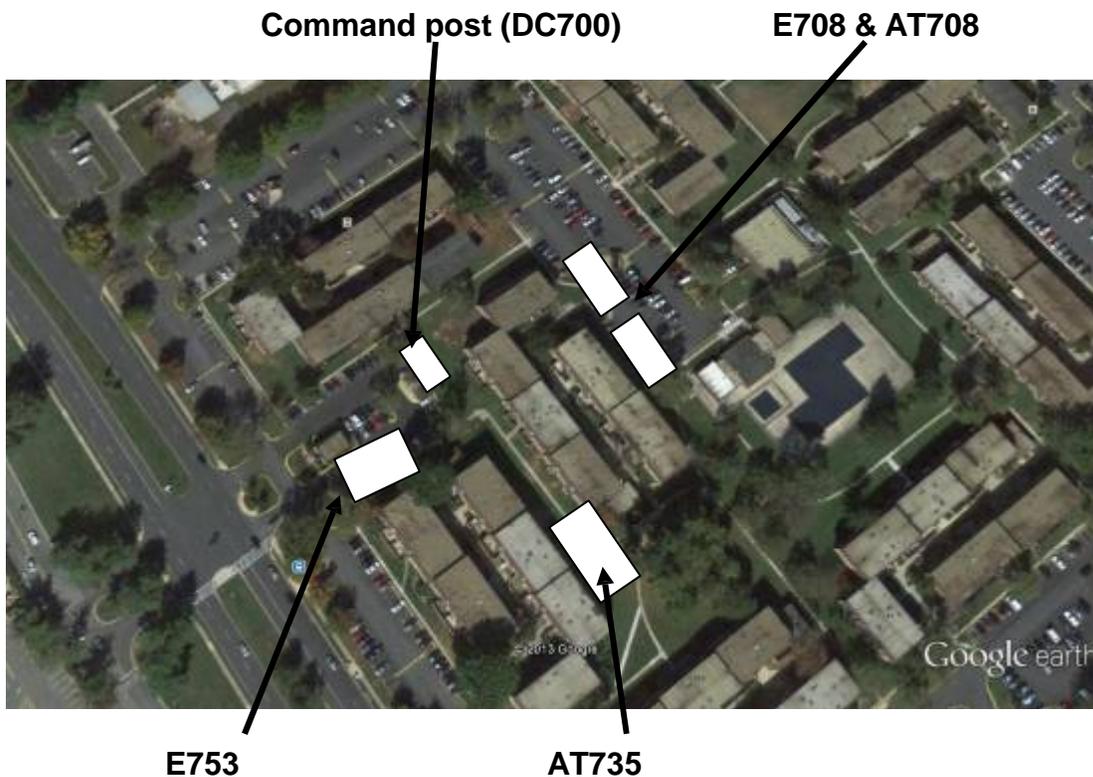
## Post Incident Analysis for 18241 Lost Knife Circle

PE722

- Engine 753 used their soft sleeve and hooked up to hydrant next to 18215 Lost Knife Cir.
- Paramedic Engine 708 used a short section to the rear intake and hooked up to the hydrant between 18235 and 18245 Lost Knife Cir.
- 5<sup>th</sup> engine (Paramedic Engine 722) used a short section to the rear intake and hooked up to the hydrant between 18447 and 18441 Lost Knife Cir.

### Tactical Positioning

- If this was not the worst building in this complex for fire department access, it was close. Tower 735 did a great job to cut a fence and maneuver their unit to a good spot on Side Charlie. The rest of the companies were at least 150' to 200' feet from the fire building.
- Units on Side Alpha were blocked out by cars in the small parking area and the limited access to the court yard set-up of the buildings.
- Units on Sides Charlie and Delta were limited to good position due to parking area and topographic terrain.



- Side Bravo had no access



~~Staging area was set up on Lost Knife Rd, but only used for a limited amount of time.~~

## Post Incident Analysis for 18241 Lost Knife Circle



## Post Incident Analysis for 18241 Lost Knife Circle

### Initial Attack Line Deployment

- There were a total of five hand-lines deployed on this fire with only four actually flowing water.
- Paramedic Engine 708 pulled a 250' 3" leader line and attached one 2" bundle to the 2<sup>nd</sup> floor.
- Engine 753 pulled a 400' 2" (standpipe packs) to Side Charlie.
- Paramedic Engine 734 pulled a 300' 3" leader line and attached one 2" bundle to the 2<sup>nd</sup> floor.
- Paramedic Engine 729 pulled a 200' 3" leader line and attached two 2" bundles to the 3<sup>rd</sup> floor.
- Paramedic Engine 722 pulled a 400' 3" leader line and attached one 2" bundle to the 3<sup>rd</sup> floor.

### EMS

- EMS group was never formally established but EMS703 updated Command on the patients that were treated and transported.
- Medic 729 treated and transported an adult male from apartment # 302 to Medstar. This patient was removed via ground ladder on Side Charlie.
- Medic 735 treated and transported an adult male from apartment #304 to Medstar. This patient was removed via ground ladder on Side Alpha.
- Ambulance 728 (Box Alarm) treated and transported two children from apartment #304 to Shady Grove. Both patients jumped from their apartment prior to our arrival.
- Ambulance 732 (Special called after 2<sup>nd</sup> Alarm) treated an adult male and a toddler from apartment # 202. Both patients refused transport.
- A four year old male was declared a priority 4 by Communications Chief 700 and transferred to MCP.

### Accountability

- Personal accountability tags (PAT) were used but not collected by command.
- Daily line-ups for Battalion 3 and Battalion 5 were on hand by command. Both of these documents were up to date and used as needed.
- There was a quick Personnel Accountability Report (PAR) done at the 20 minute mark and again 25 minutes later.
- The IDLH was lifted shortly thereafter so there was no other PAR's executed by command.



## **Post Incident Analysis for 18241 Lost Knife Circle Rapid Intervention**

- Paramedic Engine 734 (3rd Due) was the Rapid Intervention unit, but was pulled into Division 2 to assist with fire suppression.
- The Rapid Intervention Dispatch (RID) was Tower 723, Rescue Squad 741, and Medic 735.
- Rescue Squad 741 was dispatched but was placed in service when Rescue Squad 703 cleared another call.
- Rescue Squad 703 was pulled into the Rescue Group to assist with searches and Medic 735 was utilized to establish Rehab and treat patients later into the incident.
- The Rapid Intervention Group established on Side Alpha of the fire building.
- The Rapid Intervention Group was never activated and was cleared about 1 ½ hours into the incident.

### **Crew Integrity**

- Crews should remain together during interior operations at structure fires. The “bread and butter” of being a fire fighter is being an effective member of an organized team. Knowing who you work with, their strengths and potential shortcomings, and how to effectively communicate with each other will afford the best opportunity of maintaining crew integrity throughout any and all operations.



## **Post Incident Analysis for 18241 Lost Knife Circle** **Lessons Learned**

### **Command**

- Personnel must report to their unit officers, unit officers report to their group leaders or division supervisors, leaders or supervisors report to command. This rule needs to be followed or tasks will be delayed and inefficient.
- When Rapid Intervention units are needed to engage in suppression operations, Command must replace the units to maintain their vital role in the Rapid Intervention Group.
- Building layouts or preplans must be accessed quickly to the Command Post so direction is accurate. For the first 20 minutes of this fire, Command was unsure of the building's layout, which led to some confusion on the exposures.
- Accurate dispatch assignments are needed in the Command Post and updates must be given to Command by ECC of any failures or changes. Due to several units clearing other events and a failure-to-respond, the dispatched assignments were not the same as the arriving units.

### **Communication**

- The "announce" talk group was never used. Command should have used this when announcing tactical or safety messages.
- Command created the Rescue Group and called it Search on several occasions. Terminology has to stay consistent throughout the event.
- Unit identifiers must be accurate and used for all radio transmissions.
- Supervision of one of the divisions was assigned to a unit and then transferred to a Chief Officer. Other units answered up as this division officer. Personnel have to monitor the radio and know who their supervisor or leader is and what division or group they have been assigned.

### **Operations**

- Having several ground ladders placed on each side of the structure was completed and should be the norm for all working events.
- The majority of the attack lines were 300 to 500 feet in length. There were some issues that need to be addressed through good training prior to the next event. The issues were corrected quickly and the adaptability of the crews was noted. All personnel must be able to quickly build long attack lines.



## **Post Incident Analysis for 18241 Lost Knife Circle**

- Crew integrity must be maintained throughout the event by the unit officer. This means reporting to their assignment together, rehab together, etc.
- Units were sent to Rehab and did not report or reported much later. Rehab is for the firefighter's well-being; when told to report to Rehab the entire unit must report to Rehab, get checked, and hydrate as needed.