



2nd Alarm Residential High-Rise Apartment Fire
July 11, 2009
8830 Piney Branch Road
FS16's area



- Five injured civilians
- Two injured Fire Fighters
- One Mayday
- Fire on 12th floor of a 12 story building
- One apartment involved, 36 apartments affected.



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Post Incident Analysis for 8830 Piney Branch Rd

Executive Summary

At 1933 on July 11, 2009, units were dispatched for a structure fire, reported fire in apartment #1207 of 8830 Piney Branch road in Company 16's area. Units arrived to find heavy fire showing from several openings on the top floor of a twelve story residential apartment building. 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 left the patio slider door open, allowing unimpeded air flow due to significant winds to feed the fire. First companies overcame high heat and low visibility to extinguish this well developed and advanced fire in an over-stocked apartment. Numerous companies completed several rescues utilizing several tactics including: relocating to lower floors, sheltering in place on balconies and removing to the ground level. If not for the actions of the initial arriving units and their efforts this incident would have likely resulted in a number of civilian lives, significant structural damage and possibly firefighter losses.

There were two injured Fire Fighters, and five civilian injuries, one Fire Fighter and one civilian were transported to the hospital all others were treated on the scene and released. There were a few crew integrity issues which included a mayday that was quickly resolved.

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

- Complexity – delay in getting to seat of fire (12th floor)
- Exposures – Potential vertical and lateral spread to adjacent exposures and/or apartments
- Injury – The injury to two Fire Fighters which placed one company OOS and hampered one other unit.
- Rescues – 12 apartments per floor and at the time of the fire 8 of the apartments on the 12th floor were occupied.

The cause of the fire according to FEI was a faulty power cord in apartment #1207. The three bedroom apartment was converted into a five bedroom apartment with home made party walls and extra desks and dressers. The load on the electrical circuits for each room was excessive and over the limit.

Incident Statistics:

- 105 Personnel including:
- 9 Engines (39 personnel)
- 6 Truck Company's (28 personnel)
- 2 Rescue Squads (11 personnel)
- 3 BLS Units (6 personnel)

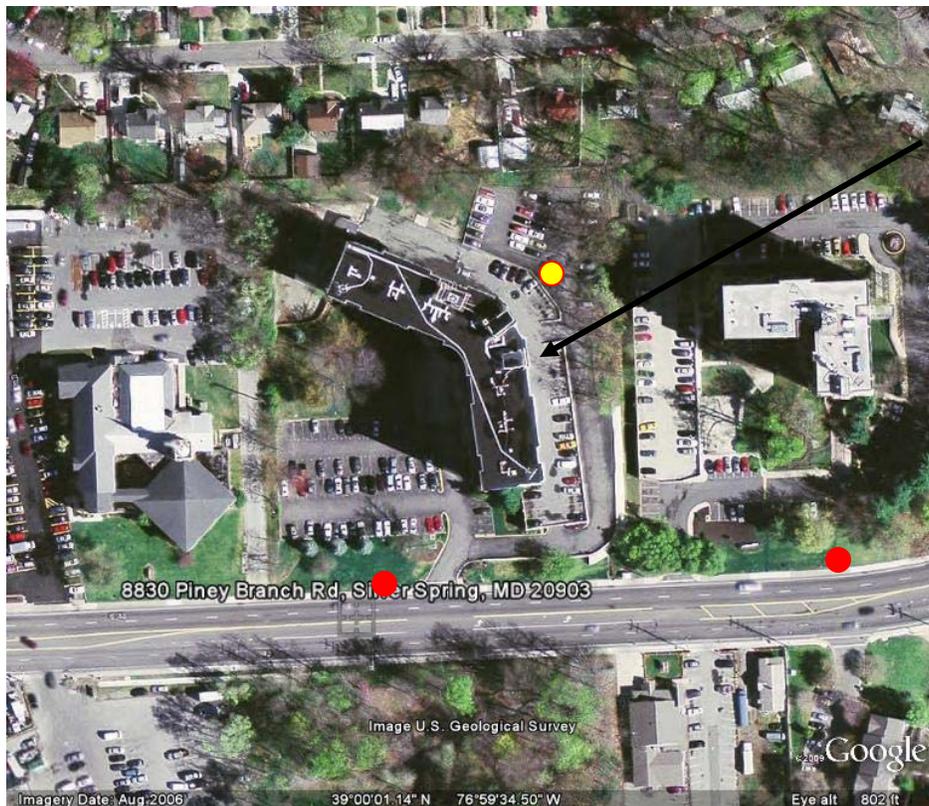


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- 3 ALS Units (7 personnel)
- 7 Chief Officers (7 personnel)
- 3 Support (7 personnel)
- \$400,000 loss to main structure & \$200,000 loss to contents

Site & Structure Layout

- Fire building identified with black arrow and pointing to the fire apartment
- Two closest fire hydrants are identified with red dots (only two used)
- Pineway Towers were constructed in 1975 as a residential apartment building and sold in 1985 and turned into condominiums.



- The complex has 12 floors with 12 apartments per floor.
- The structure is Type 1B construction with a standpipe system with two fire department connections and three risers (one per stairwell). There is a dry sprinkler system in the parking garage and a domestic wet sprinkler system in the trash chute.
- The building has a common boiler unit and HVAC unit. The building is supplied by natural gas also supplied by a common feed.
- There are three stairwells, one on each end and one in the center. Each stairwell is protected by a two hour fire separation.



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- Each floor also has a one and half hour fire separation between apartments and the common lobby.
- The building is equipped with two elevators for all floors. The elevators are equipped with fireman's control.





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Fire Code History

- Most of the violations in the past were limited to access issues and recertification issues.
- The standpipe system and elevators were up-to-date and had proper certification on record or displayed.
- At the time of the fire there were no outstanding violations or none noted post fire.

Unit Breakdown

(XXXX signifies no status or bad status)

	<u>Dispatch Time</u>	<u>On Scene Time</u>
<u>Box</u>		
E716	1935	1938
E702	1935	1937
E701	1935	1939
E834	1935	1939
E712	1935	1940
T701	1935	XXXX
T712	1935	XXXX
AT719	1935	1940
RS742	1935	XXXX
A716	1935	1938
Batt 701	1935	1939
Batt 702	1935	1949
<u>RID</u>		
T801	1940	XXXX
RS814	1940	1947
M701	1940	1945
SA700	1940	1942
<u>2nd Alarm</u>		
E719	1943	1945
E844 (replaced by E811)	1943	1958
E754	1943	1952
E801 (replaced by E807)	1943	1958
T812	1943	1958
T814 (replaced by AT718)	1947	2010
M712	1943	1945
CT705	1943	2020
AR716	1943	2007



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Unit Breakdown

(XXXX signifies no status or bad status)

	<u>Dispatch Time</u>	<u>On Scene Time</u>
<u>Special Alarms</u>		
A7124	2016	2018
M812	2016	2022
A702	2031	2041
CS700	XXXX	XXXX
<u>Chief Officers</u>		
BC704	1951	2001
C701C	XXXX	XXXX
C712	1946	2002
DC700	1939	XXXX
DC700B	1936	1950
<u>Fire Marshals</u>		
FM35	1937	XXXX
FM56	1942	XXXX
FM58	1942	2002

Initial on Scene Report and Command

- E702 advised from Carroll Ave & University Blvd East “a good column of smoke”
- E716 advised E702 that they were delayed and that E702 should get there first.
- A716 went on the scene and reported “heavy smoke from side C”
- E702 arrived prior to E716 and assumed first due engine.
- Level two command was established by E702 (Piney Branch Command) upon arrival in the attack mode.
- Battalion 701 arrived on side C and assumed command and established a stationary command post at the Battalion 701 unit.



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Communications

- Communications dispatched the incident on 7A.
- Units responded on 7B.
- Communications assigned the event to incident talk group 7C Incident 10 through 7F Announce 10.
- Most of the communications for the incident was on 7C. This included a Mayday which will be discussed later.
- 7D was used early by command for unit run-downs (Mobile Data Computer-MDC was OOS). The 2nd alarm units responded and were level two staged on 7D. EMS and Rehab were assigned to 7D later in the incident.
- 7E and 7F were never used.
- VRS was not needed, but was activated by two units.

Initial On-Scene Operations

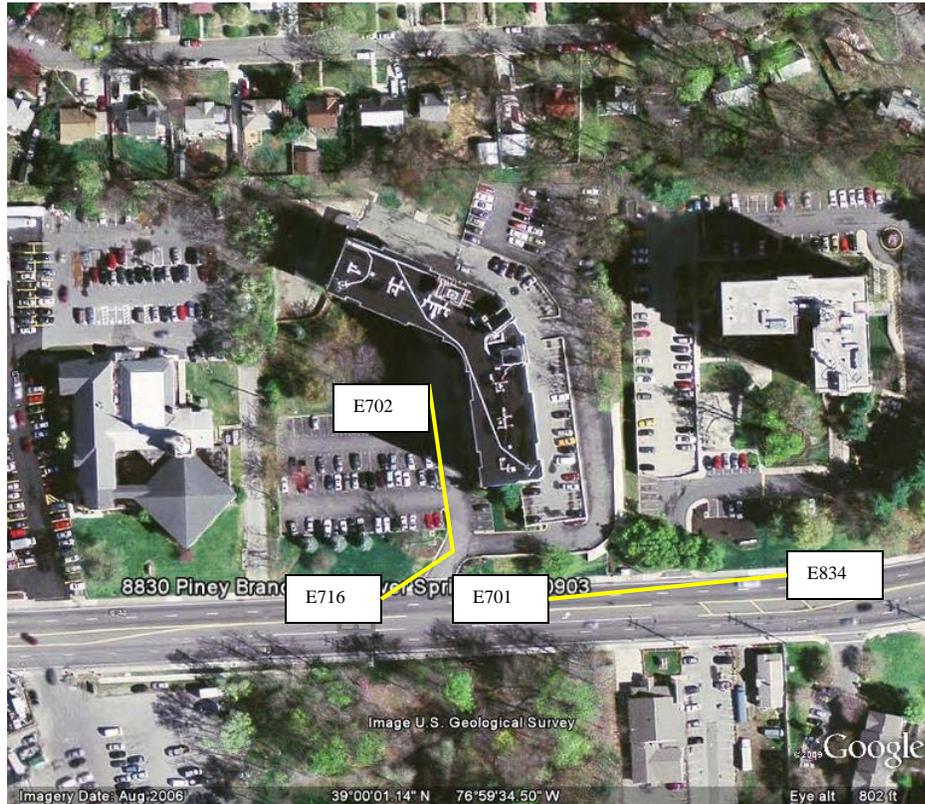
- The first alarm units followed the SOP for safe fire fighting operations, with a few expectations. The 5th due engine set-up "lobby control" but was reassigned to evaluate two of the three stairwells. The 3rd due truck was also reassigned to pressurize the stairwells, starting with the middle one (attack stairwell) and then was used as part of the "Search group"
- The following divisions or groups were established:
 - Division 12 (T701 then C814A) with E702, E716, & T701
 - Roof Division (E701) with T712
 - Search Group (AT719 then BC702) with RS742, AT719, & RS814
 - Vent Group (C812A) with T812 & AT718
 - Staging Group (E719 then C712)
 - Rapid Intervention Group (E834 then C801) E834, T801, RS814 & M701
 - Rehab (EMS702) A702, M712, & M812
- 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.



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Water Supply

- There were only two hydrants used for this fire. Both of the hydrants were on a 16" water main and tested to above 3500gpm @ 20 psi.



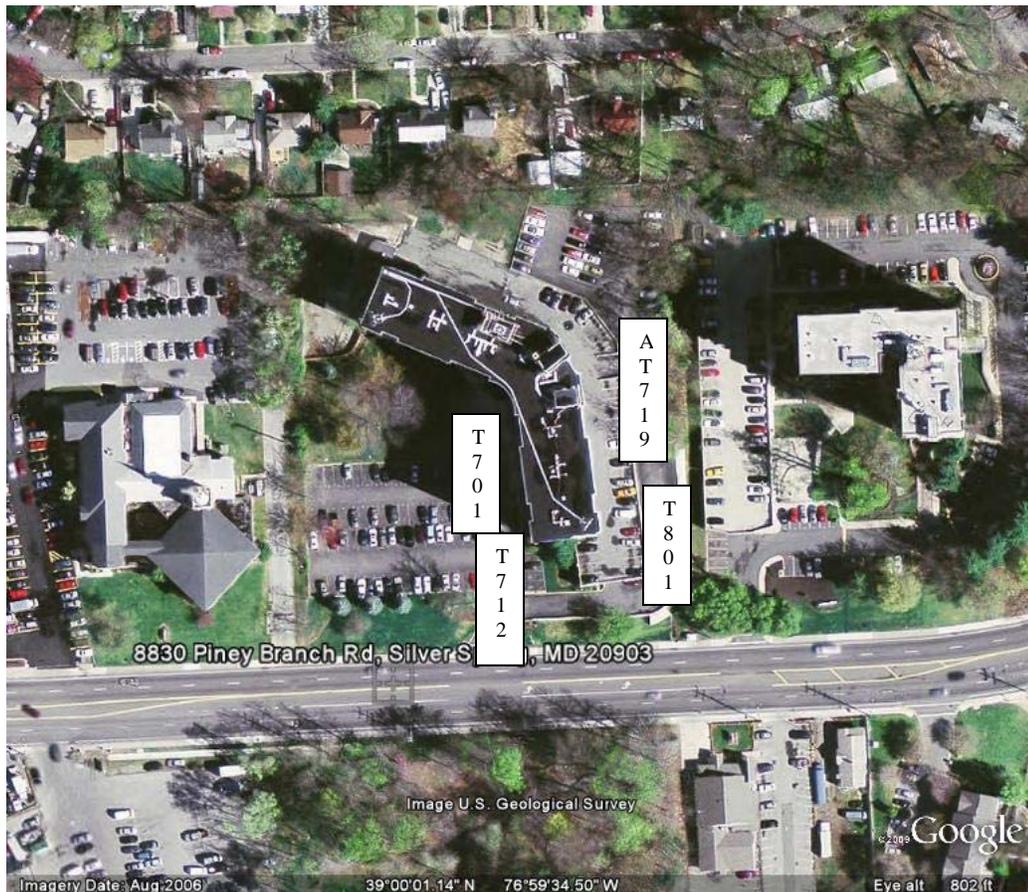
- 1st engine laid a 4" supply line from 8830 Piney Branch Rd and that was picked up by 2nd due engine.
- 3rd engine laid a 4" supply line from 8860 Piney Branch Rd and that was picked up by 4th due engine.
- There were two fire department connections for this building, only one was covered. This could have been more of a severe issue, but luckily the system was interconnected and the pump operator compensated.



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Tactical Positioning

- There was only one engine that made it into the complex, side A for water supply.
- There was limited space due to the small size of the parking lot, amount of cars parked in the lot, and the parking garage restriction on side C & D.
- 3rd due engine could have hand laid a line to side C if needed, but this was not necessary because the connections were on side A & B of the building.



- Very good truck positioning by the first four trucks. Two on each side of the building with aerials to the tenth floor.
- Staging area was the shopping center at Piney Branch Rd & University Blvd. MCP closed off Piney Branch Rd so the staging area was moved onto Piney Branch Rd one block west of the building.



Initial Attack Line Deployment

- There were a total of four hand-lines deployed on this fire with only two actually flowing water.
- The hand-lines ranged between 1 ¾" & 2" and ranged in length from 100' to 150'.
- E702 (1st Due) & E716 (2nd Due) assigned to Division 12 hooked up in the center stairwell on floor 11 and 12, respectively. Both companies tried to deploy their hand-lines simultaneously to the fire apartment, which caused problems for both companies.
- E701 (3rd Due) also hooked up on the 11th floor center stairwell, which added to the hose line entanglement issue.
- E834 (4th Due) assigned to the RIG hooked up on the 11th floor, in the East stairwell, with no issues.

MAYDAY

- At the 23 minute mark of the event a Mayday was sounded by E702 Right. He identified his unit and name and stated he had lost his officer and was low on air.
- Command asked for all units to stand-by to get more information. Command elected not to follow the SOP for Mayday and retained all units on one channel for now. It was unclear to command which unit or person needed assistance until talking to E702 Right and T701 Officer.
- The Officer and Right of E702 were operating in the fire apartment. Both of them ran low on air and communicated to each other to relocate to the stairwell. Once in the hallway E702 Right combined with T701 and headed to the center stairwell, which is the route E702 deployed from. The officer followed a different hand-line and moved to an end stairwell.
- There were attempts by both of them to find each other by calling out and asking other units, but by this point they were on opposite ends of the building.
- The two were ordered to side C on the ground level to reunite.
- After three and a half minutes of accountability checks the Mayday was declared cleared and operations returned to normal.



Accountability

- Personal accountability tags (PAT) were used but not collected by command.
- Daily line-ups for Battalion One and Battalion Four were on hand by command. Both of these documents were up to date and used as needed.
- Personnel numbers were recorded by command for the Prince George's county units, but names were not.
- There was a quick Personnel Accountability Report (PAR) done after the Mayday at the 26 minute mark.
- The first full PAR was not done until the 35 minute mark. The IDLH was lifted shortly thereafter so there was no other PAR's executed by command.

Rapid Intervention

- E834 (4th Due) was the Rapid Intervention unit. The Rapid Intervention Group (RIG) was T801, M701, and four of the eight personnel on RS814. C801 was the RIG supervisor.
- The RIG established their group on the 9th floor. And secured a hand-line on the 11th floor.
- The RIG was activated during the Mayday by command but quickly recalled when the Mayday was cleared.

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.
- There were at least two cases of crew integrity issues at this fire, one of them being the Mayday. **This practice has to stop** crews have to stay together and work together.



Lessons Learned

Command

- Command officers need driver's 24 hours a day. There are numerous events such as this one where one person command is over-whelmed and playing "catch-up" until help arrives.
- Mobile Data Computers (MDC) must be in all command units and working. With the new tough books there is no reason for command units not have a working MDC.
- Stairwells have to be identified early in high-rise buildings and their uses. The attack stairwell was identified early but which one was to be used by RIG or used by evacuation was not.
- Lobby Control was reassigned to other tasks and Lobby Control was not staffed until later in the event. Regardless of a fire control room, Lobby Control must be staffed on high-rise events.
- Personnel report to their unit officers, unit officers' report to their group leaders or division supervisors, leaders or supervisors report to command.

Communication

- Only two talk groups were used for this event which resulted in heavy communication on these two talk groups. If the command team was expanded the event could have been divided up better.
- The command unit had three mobile radios, this was not enough. Command had to use the portables assigned to Battalion 701 to cover all of commands needs.
- The announce talk group was never used. Command should have used this when announcing the Mayday and clearing the Mayday and other tactical or safety messages.
- A complete PAR was not taken after the Mayday, this should have occurred.
- Command created the Search group and called it Rescue on several occasions. Terminology has to stay consist throughout the event.
- 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.



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Operations

- Personnel and units assigned to the same group or division have to work together to accomplish the group or division goals. These goals have to be prioritized by the supervisor or leader. For example on Division 12 two hand-lines had been placed in service, primary and back-up line. Instead of ensuring the first hand-line is in place then the second hand-line, crews tried to simultaneously put both hand-lines in service.
- Crew integrity must be maintained throughout the event by the unit officer. This means reporting to their assignment together, rehab together, etc...
- One of safety officer's responsibilities on a fire ground is to monitor operations and address safety issues through command. The safety officer reported to the fire floor and gave orders to personnel instead of their supervisors or leaders. The orders were also operational related items instead of safety issues.
- Fireman's control was used on this event for both elevators by the first couple of units and then not used again for a while. If possible elevators should be returned or sent back to lobby for next crews utilization. Lobby control has to gain control of the elevators and maintain control until command releases them.
- Units were sent to Rehab and did not report or reported much later. Rehab is for the Fire Fighters well being, when told to report to Rehab the entire unit must report to Rehab, get checked, and hydrate as needed.
- All fire department connections, standpipe & sprinklers, must be charged unless told differently by command.
- Hand-line management was an issue in the center stairwell. Crews tried to place three hand-lines in service in the same area. There should be a maximum of two hand-lines in one area, door, or stairwell.



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Preplan or Maps

