



## **National Fire Fighter Near-Miss Reporting System Reports Related to Maydays**

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**Report Number:** 05-0000418  
**Report Date:** 08/08/2005 2033

### **Demographics**

Department type: Paid Municipal  
Job or rank: Captain  
Department shift: 24 hours on - 48 hours off  
Age: 34 - 42  
Years of fire service experience: 17 - 20  
Region: FEMA Region VI  
Service Area: Urban

### **Event Information**

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.  
Event date and time: 05/02/2005 1600  
Hours into the shift: 9 - 12  
Event participation: Told of event, but neither involved nor witnessed event  
Weather at time of event:  
Do you think this will happen again? Uncertain  
What do you believe caused the event?

- Communication
- Training Issue
- Situational Awareness
- Decision Making
- Individual Action

What do you believe is the loss potential?

- Life threatening injury

### **Event Description**

Units responded to automatic alarm at church. While enroute, incident was upgraded to full alarm assignment on reports of fire in the "red brick" building. First alarm assignment consisted of Q(X), E(X), E(XX), E(XXX), E(IV), B(X). Q(X) and E(X) arrived 1st with nothing visible from large church. Q(X) took command and positioned on the south side, and E(X) positioned on the North-side. On investigating E(X) reported working fire on second story and was stretching line to attack fire. Approximately 1 minute after arrival command requested 2nd alarm and sent Q-crew in to assist with evacuation and investigation. At 2 minutes in command advised that smoke condition had changed, and warned interior crews that they possibly had a "well charged attic". E(X) acknowledged and proceeded to attempt to locate and extinguish a fire located in 1 room (per radio report). At approx 4 min in E(XX) reported fire at an exterior porch and ceiling starting to come in on the north side. As B(X) arrived and assumed command, radio time was hampered with the request for additional resources such as police and our laundry list of things. At approximately 6

minutes in we had approximately 3 big boosters and 1 super booster operating. Units on the interior were requesting more pressure. At approximately 8 minutes in, units were not reporting any progress and command was debating a switch to defensive operations. At this point a total of 3 maydays were transmitted by interior crews with members lost and off of hose lines. E(X) firefighter ended up outside the building and was out of air. His lieutenant was left in the building. At this point the decision to go defensive was made, and all members were ordered out. E(XX), knowing the situation, decided to stay and was able to find E(X) lieutenant, who was lost and low on air. All companies were able to exit and after a large aerial assault the fire was brought under control.

### **Lessons Learned**

1. Exterior smoke conditions must match reports from interior companies. 2. Consider the size of the structure when reading smoke conditions. 3. Sound your mayday as soon as you are in trouble. 4. Company officers must keep track of their crew members and their air supply. 5. Radio discipline (must be observed) from units not engaged in fire ops. 6. Support units can be called for on cell phones or included as automatic dispatch. 7. Fire is not 1 dimensional. If your lines are not reducing the volume, it may be beyond interior operations. 8. Thermal imagers are a must for every company on the fireground. 9. Sometimes the building will win. 10. Know what the fire is doing to the building and what the building is doing to the fire.

**Report Number:** 05-0000663

Report Date: 12/19/2005 1542

### **Demographics**

Department type: Paid Municipal

Job or rank: Captain

Department shift: 24 hours on - 24 hours off

Age: 34 - 42

Years of fire service experience: 14 - 16

Region: FEMA Region X

Service Area: Urban

### **Event Information**

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.

Event date and time: 11/13/2005 0035

Hours into the shift: 13 - 16

Event participation: Involved in the event

Weather at time of event:

Do you think this will happen again? Uncertain

What do you believe caused the event?

- Situational Awareness
- Decision Making

What do you believe is the loss potential?

- Lost time injury
- Life threatening injury

### **Event Description**

The alarm was for a residential structure fire. 14 units were assigned totaling 34 personnel. Initial reports were 5-7 people still inside the structure. The building was built in the 1940's with multiple additions since, turning it into a duplex with one of the units also having a small upstairs apt. The building, including the various roof structures, was very compartmentalized. The only non-ladder access to the second floor apartment space was a steep and narrow iron spiral staircase. The street is a dead end with no hydrants. The first unit on location was a Truck Company with a pump and 200 gallons of water. They sized up the incident, established command, and stated their action plan. The initial fire was caused by arsonists using accelerants inside a cab-over camper that was stored next to the building. The fire spread quickly into the attic areas of the structure. The truck crew pulled a 1-3/4" line and attempted to confine the fire while search and rescue operations were done. The second unit on-location was a Rescue company, which was first assigned to search the adjacent downstairs apartment, then the second floor for victims. When we packed up to search the upstairs, I notified command. Conditions in the apartment were heavy smoke, but no heat. The

engineer was left at the doorway to keep it secure while the FF and I searched the room. We did a quick scan with the thermal imager from the doorway, but due to the heavy smoke, were unable to see the screen during the rest of the search. Upon reaching the back wall and finding no victims on the bed, I attempted to make radio contact with the engineer. He did not answer via radio, but did yell that he was still by the doorway and was OK. I replied that we were OK, did not find victims, and are on our way back. We re-established physical contact ~5' inside the doorway. At this point, the room suddenly got very hot, so both the FF and I said it's time to leave. I then started seeing the rollover next to my head, we were on hands and knees, and yelled, "It's gonna flash. Bail out! Bail out!" The room then exploded in flames. Knowing we were potentially in big trouble, I called a Mayday as we bailed out. The engineer was first out the door and went off the landing of the spiral stairway, entangling his air pack. He was able to bail out of the air pack and exit the building. I went down the stairs headfirst and the firefighter slid down feet first right behind me. Upon exiting the building and finding the crew intact and OK, I notified command that we were out. Oxygen was apparently introduced to the inadequately ventilated fire when crews downstairs gained access to one of the many compartmentalized attic sections of the building. This enabled the fire to build and heat the heavy smoke and gasses in the room we were in. Due to the zero visibility and being close to the floor, we were unable to see or feel the changing fire conditions. The timeline from a cool, smoke-filled room to a smoke explosion that blew out a window and sent flames down the stairway was less than about 15 seconds.

### **Lessons Learned**

1. Initial 1-3/4 line for fire confinement was shortlived by the Truck Company, due to accelerants used to start the fire and limited water supply.
2. Coordinated ventilation was needed on the building, and would likely have prevented the smoke explosion.
3. RIC needs to be assigned and then, when mustered, become established. The assignment alone does not mean they are ready for deployment.
4. The communication feedback model should be used. That the last communication from me was to look for the engineer caused confusion to command and other units who then thought the mayday call was for a lost crew member.
5. Crew integrity is a must at all times.
6. Training and experience are both important for crews working without a hoseline. Especially for being able to recognize and heed changing fire conditions and knowing when to get out.

**Report Number:** 06-0000302

Report Date: 05/28/2006 1137

### **Demographics**

Department type: Paid Municipal

Job or rank: Battalion Chief / District Chief

Department shift: 24 hours on - 24 hours off

Age: 52 - 60

Years of fire service experience: 30+

Region: FEMA Region VI

Service Area: Urban

### **Event Information**

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.

Event date and time: 09/01/2005 1500

Hours into the shift: 5 - 8

Event participation: Told to and submitted by safety officer

Weather at time of event:

Do you think this will happen again? Yes

What do you believe caused the event?

- Teamwork
- Accountability
- SOP / SOG
- Command

What do you believe is the loss potential?

- Life threatening injury

### **Event Description**

Fire companies responded to a structure fire, a 1 story wood-frame, on pier and beam, shot-gun style home. There was fire visible from the B and D divisions of the house. Crews attacked the fire with 2 hand-lines as the truck company ventilated the roof. There was the usual cluster of men at the front door of the house with no one attempting to get past the living area. The Officer involved went with his two crew members through the hoard and made their way deeper into the house. Here the Officer separated from his crew and became disoriented as to where he was. He said he called for a "Mayday" and received no response. He called again for a "Mayday" and again received no response. The officer stated he was running low on air and the area he was in was getting extremely hot. Fortunately, he was able to find a door to a hallway that led out of the house and was able to escape. Upon review of the incident, no one heard the call for help, even though there were two Chiefs, an accountability officer, and RIT on the scene.

### **Lessons Learned**

The officer, upon review of the recorded events @ the scene, did not call a "Mayday", as outlined in SOGs, but called that he was lost in the building and couldn't find his way out. The officer should have activated his PASS or electronic accountability device as outlined in SOGs. The officer should have maintained crew integrity as outlined in SOGs. The accountability officer and the Chiefs should have monitored their radios more closely as should the Dispatcher. His crew members should have reported his disappearance immediately to the Incident Commander.

**Report Number:** 06-0000501

Report Date: 10/04/2006 1644

### **Demographics**

Department type: Paid Municipal

Job or rank: Lieutenant

Department shift: 24 hours on - 72 hours off

Age: 34 - 42

Years of fire service experience: 17 - 20

Region: FEMA Region II

Service Area: Urban

### **Event Information**

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.

Event date and time: 03/01/2006 2200

Hours into the shift: 0 - 4

Event participation: Told of event, but neither involved nor witnessed event

Weather at time of event:

Do you think this will happen again? Uncertain

What do you believe caused the event?

- Teamwork
- SOP / SOG
- Situational Awareness

What do you believe is the loss potential?

### **Event Description**

Members responded to a bedroom fire on the 6th floor of a 13 story fireproof multiple dwelling. As the ladder company inside team held the bedroom fire in check with a water can extinguisher, the Outside Vent FF forced an adjoining apartment door as an area of refuge. As the Engine Company approached the fire apartment door with a charged hoseline, the window in the fire room failed. Conditions deteriorated severely in a matter of seconds. Members were unable to close the apartment door and were forced to abandon the hoseline because of severe, wind driven fire conditions. Two firefighters were able to take refuge in the adjoining apartment while other members made their escape via the interior stairs. One member became trapped in the public hallway as heavy fire was venting in the direction of the attack stairwell. The trapped firefighter attempted to transmit a MAYDAY message and began calling out for help. Upon hearing his voice, the two firefighters who sought refuge in the adjoining apartment began to bang on the apartment door as a guide to the trapped firefighter. The trapped firefighter responded to the banging and moved into that direction. One firefighter entered the hallway and assisted the member to safety. The member, although injured, survived because an area of refuge had been secured.

### **Lessons Learned**

1. The outside vent firefighter followed proper SOP's. An area of refuge was secured on the same side of the hallway as the fire apartment door. This prevented the fire from being drawn across the public hall and into that area of refuge. 2. Members should try to exit in the direction of the interior stair. 3. Control the fire apartment door is a critical task in preventing hallway conditions from deteriorating and becoming part of the fire area. 4. The trapped firefighter was guided in the direction towards the area of refuge by members making loud affirmative noises to help guide him. 5. When conditions in the public hall deteriorate and hamper the advancement into the fire apartment, the unit operating the 1st hoseline should attempt to maintain their position. The second hoseline should be charged and advanced in unison with the first line. An exterior attack is to be considered at fires with blowtorch conditions.

**Report Number:** 06-0000583

Report Date: 11/27/2006 1930

### **Demographics**

Department type: Paid Municipal

Job or rank: Fire Chief

Department shift: 24 hours on - 48 hours off

Age: 43 - 51

Years of fire service experience: 21 - 23

Region: FEMA Region VI

Service Area: Suburban

### **Event Information**

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.

Event date and time: 08/17/2006 2252

Hours into the shift: 13 - 16

Event participation: Told of event, but neither involved nor witnessed event

Weather at time of event:

Do you think this will happen again? Uncertain

What do you believe caused the event?

- Situational Awareness
- Decision Making
- Command

What do you believe is the loss potential?

- Life threatening injury
- Lost time injury

### **Event Description**

On Thursday, August 17, 2006, at 2252, the Department responded to a 3-alarm apartment fire. The apartment complex involved in this incident consists of 10 buildings comprising 176 living units. Construction of the apartments is class D, wood frame with brick veneer. The actual building involved in the fire is two-story consisting of 32 living units. It is 306 feet long and 50 feet wide and one of the largest in the complex. Two breezeways cut through the building and each has a stairway for access to the second story units. There is a brick firewall on both sides of each breezeway. There is no built-in fire protection system in the apartment building. Weather at the time of the fire was clear with a strong south wind. The initial first alarm response consisted of 2 Engines, 2 Trucks, 1 light/air truck, 1 Ambulance, Safety Officer and Deputy Chief. Dispatch reported trapped occupants and this information was confirmed by the first arriving units. The first arriving Engine reported on scene with heavy fire showing from the front of the building ("A" side). The Engine Officer ordered the first arriving Ambulance crew to advance a 2 ½ inch line to protect the east breezeway entrance on the "A" side of the building. The first arriving Engine Officer and crew then advanced a 1 ¾"

hand line into the east breezeway to attempt rescue but discovered excessive fire conditions on the “C” side of the building. The first arriving Engine Officer determined rescue was improbable and the Company retreated to re-deploy. The second arriving Engine Company advanced a 1 ¾" hand line with a [type deleted] nozzle to the second floor also through the “A” side east breezeway to attempt rescue. The Company encountered extreme fire conditions. The second arriving Company Officer noticed the brick firewall beginning to buckle. The Company abandoned the hand line and started back down the stairs. Two Firefighters were knocked down the stairs by the collapsing brick wall and the 3rd Firefighter became entrapped in debris. A “Code Red” was immediately transmitted and the IC ordered the building evacuated. The trapped Firefighter radioed his location but was unable to manually activate his personal alert system. The trapped Firefighter’s mayday transmission was not heard on the fire ground. The first arriving Engine Company Officer established RIT while the Engine crew and Ambulance crew simultaneously assisted the two injured Firefighters to a safe area for evaluation and began debris removal searching for the trapped Firefighter. The trapped Firefighter was able to extricate himself and walked from the “C” side to the “A” side collapsing near the other injured Firefighters. A PAR was called and all companies were accounted for during the roll call. The IC changed to a defensive strategy and extinguishment was accomplished by utilizing exterior master streams and hand lines. Two Firefighters were transported with one hospitalized suffering a leg fracture and the other treated for lacerations and minor burns then released. One Firefighter was treated at the scene for minor injuries and was later transported by staff car to the hospital for evaluation upon complaining of knee and hip pain. The second arriving Truck Company led the secondary search of the building once it was deemed safe by the IC. One civilian fire fatality was confirmed during the overhaul and investigation of the fire. Two civilians were transported and hospitalized with second-degree burns.

### **Lessons Learned**

1. Ensure that a complete size-up (360°) is conducted prior to making an offensive attack.
2. Ensure that risk vs. gain is evaluated prior to making entry in fire-involved structures.
3. Train firefighters on initiating emergency traffic and manually activating their personal alert safety system when they become lost, disoriented, or trapped.
4. Stop all non-emergency radio traffic during “Code Red” and PAR.
5. Ensure Command notifies Dispatch of all benchmarks including completion of PAR and “Code Red”.
6. Ensure that IRIT and RIT are established and maintained throughout the incident.
7. Utilize short, precise, and plain language messages.
8. Use geographical designations (i.e. A, B, C, and D) to communicate location.
9. Address the needs of an injured firefighter’s crew.

**Report Number:** 07-0000990

Report Date: 07/11/2007 1141

### **Demographics**

Department type: Paid Municipal

Job or rank: Deputy Chief

Department shift: 48 hours on - 96 hours off

Age: 25 - 33

Years of fire service experience: 4 - 6

Region: FEMA Region IX

Service Area: Urban

### **Event Information**

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.

Event date and time: 07/04/2007 1600

Hours into the shift:

Event participation: Witnessed event but not directly involved in the event

Weather at time of event: Clear and Dry

Do you think this will happen again?

What do you believe caused the event?

- Communication
- Training Issue
- Accountability
- Situational Awareness

What do you believe is the loss potential?

- Minor injury

### **Event Description**

Upon arrival, the rescue unit [number deleted] was assigned to roof ops by the IC [deleted]. They placed a 35 ft ladder on the a/b corner. Upon gaining access to the roof they were met by heavy smoke conditions. Multiple roof jack vents had heavy smoke coming from them. The captain [name deleted] checked the roof to determine the extent of roof involvement. Upon the initial walkout, the roof was spongy in non-involved areas. The fire wall was breached on the b side but the fire wall on the d side was still intact. The rescue started vertical ventilation above the fire room and were met by heavy flames from the roof. Upon completing this cut they moved back to the b side over the fire wall. The rescue unit vertically ventilated this area and was met by heavy smoke conditions. They went back to the initial roof cuts and extended these cuts with an apparatus operator and 2 firefighters [names deleted]. The cuts were extended to prevent further lateral spread since these holes were too small and smoke conditions were sucking in and out with pressurization. During this operation I walked across the a side roof and met an apparatus operator on the d side fire wall. He was confirming that the fire wall was holding. I confirmed that he did not need any more assistance and

walked back to my crew. While sounding the roof along the way it was spongy but not to the point of breaking. Upon returning back to my crew, who was finishing up, the apparatus operator informed me that the roof was starting to get worse. At this point one of the firefighters fell through the roof, which was noticed by the apparatus operator, who informed me. I attempted to call a mayday but was unable to get through the radio on the tactical channel. At this point I walked over to the edge of the roof and saw the chief and threw my pike pole down towards him to get his attention. I re-transmitted the mayday and was acknowledge this time. I returned to the hole that the firefighter had fallen through, and was told by the apparatus operator that he saw the firefighter who fell get up and be escorted out of the building. I then went back to the edge of the roof and confirmed visually that he had walked out of the building and was being taken care of. Upon seeing that the firefighter was being attended to, the rescue unit moved off the main center roof and onto the b side roof until a good knock down of the attic fire. They confirmed no further extension to the b and d side fire walls and then moved off the roof.

### **Lessons Learned**

The rescue unit failed to properly size the ventilation hole for the amount of fire involvement in the common attic. Failure to place a second ladder that they could use in the event their primary access/egress route became blocked. Unable to get the mayday out initially due to heavy radio traffic and once it was the radio was not cleared for this priority traffic. Upon finding the firefighter safe, no termination of the mayday was heard by the rescue unit. Lessons to be learned: Rescue unit needs more practical training on roof operations, specifically on how to size a vent hole. After talking with my crew they said they needed to cut a larger hole the first time. They tunneled in on a 4 x 4 vent hole size. Continue to assist fire crews on the roof with secondary egress routes or needed fire ground operations. Establish and review mayday policies and practices for radio traffic and accountability. Need to establish multiple RIC teams for larger fires and not in one location.

**Report Number:** 07-0001061

Report Date: 09/19/2007 1625

### **Demographics**

Department type: Combination, Mostly paid

Job or rank: Fire Chief

Department shift: Other: Mixture of 24/48 & hourly

Age: 34 - 42

Years of fire service experience: 17 - 20

Region: FEMA Region V

Service Area: Suburban

### **Event Information**

Event type: Training activities: formal training classes, in-station drills, multi-company drills, etc.

Event date and time: 09/08/2007 0925

Hours into the shift: 0 - 4

Event participation: Told of event, but neither involved nor witnessed event

Weather at time of event: Clear and Dry

Do you think this will happen again? Yes

What do you believe caused the event?

- Command
- Communication
- SOP / SOG
- Training Issue
- Situational Awareness

What do you believe is the loss potential?

- Minor injury

### **Event Description**

On September 8, 2007, we were conducting live fire/search training at an acquired structure located at [address deleted]. At approximately 0800 hours, crews began arriving on the training ground. Participants were divided into crews and were asked to assist the instructional team with the remaining set-up. A safety briefing and walk-through were conducted. At approximately 0915 hours, the lead instructor confirmed the readiness of crews and staff. Shortly after receiving the "go-ahead" from all of the crew leaders, safety personnel, and the burn officer, a medium size Class A fire was initiated in the corner of the C/D bedroom in accordance with the specifications established in Evolution #1.

Evolution #1 (Taken directly from the Training Officer's Lesson Plan)

"Participants will enter the structure through the A side door, and advance a hose line to bedroom C/D corner where a small Class A fire will be set in the corner of the room. Search crews will advance through structure utilizing basic search techniques and locate a victim in bedroom A/D corner. Instructors will at that

time provide fire extinguishment technique instruction to the participants, and extinguish the fire using a 1 3/4" hand line. Instructors will be monitoring the conditions of the fire at all times and the interior safety officer will insure that safe conditions are maintained at all times." The search crew (three person crew) entered the structure at the A side and initiated a left handed search of first floor. The crews arrived in the kitchen area and were instructed to move on to the center hallway by a member of the safety team. The search crew continued down the main center hallway until they reached the fire room. Firefighter A entered the room, while the remaining members of the crew stayed in the hallway. Two members of the search crew report being struck with ceiling debris as they entered the fire room. After being in the fire room for only a short period of time Firefighter A reported experiencing a drastic increase in the level of heat within the room. Firefighter A stated that he yelled out requesting the attack line, but that the attack line crew did not respond. At this point the attack line crew had entered the building and was located at the entry point of the center hallway (also a three person crew). Firefighter A stated that he returned to the entry door of the fire room and yelled out to his crew to leave, Firefighter A stated that at this point he felt his arms, elbows, and ears heating up to the point that they felt burnt. Firefighter A stated that no one seemed to be reacting to his calls for assistance so he forced his way into the center hallway in an attempt to escape the heat condition. Firefighter A landed on top of Firefighter B, causing Firefighter B's face piece to compress and become displaced, Firefighter B, now trapped below Firefighter A, began yelling for assistance. The burn officer was observing the crew from the bathroom entryway when he heard Firefighter B calling for assistance, the Burn Officer stated that he found the search crews directly outside of the door to the burn room tangled up with one another. The Burn Officer immediately announced a "MAYDAY" and requested that the building be evacuated. The Burn Officer stated that he stood up from his squatted position in the hall and began pushing personnel down the hallway to the exit. Shortly after hearing the "MAYDAY" the outside Safety Officer reported seeing people coming out the front door. The hose crew reported that shortly after the "MAYDAY" was announced someone from behind them shoved additional hose into the area, forcing the nozzle to become displaced from the nozzleman's hands. As the Burn Officer assisted crews in their evacuation of the first floor he encountered a 1 3/4" pre-connect lying on the floor of the hallway. The Burn Officer stated that he immediately extinguished what he classified as a small-medium size Class A fire in the corner of the bedroom. The Burn Officer stated that the heat within the space was moderate. The Burn Officer requested that a PAR be initiated by the outside Safety Officer. All crews were found to be accounted for. A pre-placed ventilation panel over the C side bedroom window was pushed open to assist in the ventilation of the space. The larger horizontal vent was also opened and a PPV fan was turned in. Crews affected by the incident were treated by on site EMS and Firefighter A was transported for treatment of thermal burns to [a local] Hospital. The Fire Chief was notified and burn training was suspended for the day.

## **Lessons Learned**

**Findings, Discussion, and Recommendations Findings:** 1.) NFPA 1403 Standard shall be followed in the development and preparation of all live fire trainings:  
**Discussion:** The training staff put great detail and care into the development of this acquired structure. A NFPA 1403 checklist was included in their pre-burn paperwork. The staff needs to commit to following all of the recommendations within the 1403 standard. **Recommendations:** • There should be NO flammable liquids used in fire sets. • Extra effort should be made to ensure that makeshift doors remain in place on rooms that are being used to house fire. 2.) Pre-burn procedures, as they relate to communicating the goals and objectives of an evolution need to be improved. **Discussion:** During the after action meeting, several of the participants verbalized their concerns regarding the search objectives. They felt that if provided a standard script they would have known better what to do. **Recommendations:** • Building layout, goals & objectives, and evolutions should be communicated in the participant briefing and then should be posted on or near the acquired structure. • Safety briefing should include instructions on Mayday & Evacuation procedures. 3.) Our search and rescue philosophies, policies and procedures need to be reviewed, revised, and re-trained upon. **Discussion:** There seems to be a great deal of confusion surrounding the Division search and rescue oriented search philosophy and techniques. Search teams are still apprehensive to search for trapped victims without the immediate availability of a handline. Search teams are still not communicating during their evolution. Crews aren't considering the use of sound Vent, Enter, and Search (VES) techniques in situations where it is the safest and most efficient ventilation technique. Crews are still reporting to their fire ground assignments without the proper tools and or equipment necessary to do the job. **Recommendations:** • The Division should provide instruction and practical training on search and rescue techniques annually (to include VES). • Crews should employ sound ORIENTED search techniques (emphasis should be placed on intelligence gathering, size-up and pre-fire planning). • Crews must be properly equipped for search tasks. • Search crews MUST employ search rope bags when conducting oriented search. • Search crews MUST communicate with one another and with the command post. • Search crews should NEVER enter a fire room (s) unprotected. Doors should be used to confine a fire and search teams MUST communicate their findings to attack crews. Search team should withdraw from any area where a fire room can't be controlled, especially if that fire room threatens the search team's escape. • Crews need to spread out and use a team approach. • Emergency egresses should be preplanned and utilized in case of MAYDAY/Evacuation. 4.) Sound fire attack tactics and strategies must be employed at every incident, coordination of ALL fire ground tactics is essential to the safety and success of every operation. **Discussion:** Coordinating fire attack and search operations have to be carefully orchestrated; hose crews must be vigilant of fire conditions and be ready to defend a space to support an emergency evacuation. **Recommendations:** • Nozzle men must maintain the nozzle at all times. • Additional hose training is needed. 5.) Rapid Intervention Team **Discussion:** Firefighters assigned to the RIT MUST REMAIN VIGILANT! The RIT assignment is not a rehab assignment; crews must be ready, fresh, and

prepared. RIT teams must remain active on the fire ground. The RIT assignment is a planning function, teams should be constantly planning their strategies for making firefighter rescues. RIT members must maintain situational awareness; they need to know where the fire is, where it is going, what hazards are present, where people are, and they must be consistently looking for a strategy to access the areas that these tactical evolutions are occurring. Recommendations: • Additional RIT training is needed. • The RIT team should be maintained in a ready state. This means that they must be ready to deploy on a moments notice. • RIT teams MUST action plan, develop plans for accessing downed firefighters in every section of the house. • RIT team must be additional eyes for the Safety Officer, the safety officer must work closely with the RIT. 6.) An effective communications system was not in place and utilized. Discussion: The consensus of the participants was that there were several breakdowns in communications. There was some confusion as to what talk group the drill was being carried on (Operations or Training). When selecting a communications talk group we must use a talk group that the communications center has access to. Recommendations: • The objectives of the drill need to be clearly communicated to the participants. • Every interior Firefighter needs to be equipped with a handheld radio. • Crews need to communicate better with members of their team (search, attack, RIT, etc.). • Training evolutions should be moved to a talk group that can be monitored. • Immediate steps need to be taken to ensure that operational talk groups can be recorded. • EMERGENCY TONES and announcements should be drilled regularly and used during training sessions to help personnel identify them. 7.) Crews must react appropriately to changing incident conditions. The MAYDAY procedure and firefighter survival practices and procedures MUST be adhered to. Discussion: The consensus of the participants was that further training and drilling on the Division's Safety Procedures (specifically MAYDAY) is needed. Most participants state that the situation occurred so quickly that there was no time to implement a management strategy. Recommendation: • Every Firefighter should know how to launch MAYDAY; this procedure should be worked into regular drills throughout the year. • Command staff should be trained and practice management of MAYDAY. • RIT team should react to the MAYDAY by providing outside support (ventilation, laddering, staffing of back-up line) until they are activated to make an interior rescue. • PAR has to be automatic • Evacuation signal must be used when buildings are evacuated. 8.) Effective and comprehensive Incident Command and control practices and procedures were not implemented. Discussion: The training staff indicated that a full command staff should be implemented anytime we are burning. This will require the cooperation and assistance of the entire command staff. Recommendations: • Implementation of the entire available command staff or the utilization of command staff from other area fire departments to ensure that all level of the ICS are activated during live fire evolutions. • Training events should be managed as if they were the real thing.

**Report Number:** 08-0000020

Report Date: 01/12/2008 0023

### **Demographics**

Department type: Paid Municipal

Job or rank: Deputy Chief

Department shift: Other : 5-6

Age: 43 - 51

Years of fire service experience: 21 - 23

Region: FEMA Region IX

Service Area: Urban

### **Event Information**

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.

Event date and time: 12/17/2007 1100

Hours into the shift:

Event participation: Told of event, but neither involved nor witnessed event

Weather at time of event: Clear and Dry

Do you think this will happen again?

What do you believe caused the event?

- Equipment

What do you believe is the loss potential?

- Life threatening injury

### **Event Description**

While working in the interior my lapel mic cord became entangled in debris. It turned out to be a dining room chair. I had the radio placed into the radio pocket on my turnout coat, and was holding the lapel mic in my right hand. I also had a T.I.C. in the other hand. I was probably stuck in my position for 3 or 4 minutes. Visibility was pretty much zero. My location was probably about 10' – 15' inside the structure. I missed a lot of radio traffic while trying to untangle myself and I understand this was a cause for concern for those outside. I considered calling a Mayday but decided to hold off as I had a lot of firefighters around me and one was trying to assist me. After a while, the radio actually pulled out of my pocket and fell to the floor and I was able to drag the chair and radio to an area with better visibility and get untangled. I had an earlier problem with the cord getting stuck in my air pack frame and was not able to get it up to my face.

### **Lessons Learned**

1. The use of the lapel mic is not mandatory. It is an option that will allow the Captain to have both hands free during non-transmission times. 2. Some personnel have used a small piece of nylon webbing to hold their radio. This allows the mic speaker to be closer to the ear and frees up both hands. Regardless of how you choose to carry the radio, it is never acceptable to be inaudible (unless

out of your control) during emergency operations. 3. Newer turnouts are coming with a lapel mic clip on the right upper chest. This is designed so the mic is clipped to it. When this is done, the cord of the mic is naturally close to the chest, making entanglement less of a risk. 4. In the case above, the FF states he had the mic in his hand. After discussing this, he feels this was at least partially to blame for the entanglement. He suggests clipping it to the airpack strap close to where the newer turnouts have their mic clip and leave it there to use. This also may assist in the voice amplifier not being too close to the mic, allowing for a clearer transmission. 5. Remember, calling a MAYDAY is NOT a sign of weakness, but of strength and while in this case there were people to assist and quite possibly a MAYDAY was not required, it's important for the IC, ISO, etc to understand you are having a problem so proper resources can be deployed, etc.