



**National Fire Fighter Near-Miss Reporting System**  
*In Support of the 2011 Fire/EMS Safety, Health and Survival Week*

**Reports Related to Being Ready for the Mayday**  
*Personal Safety Equipment, Communications, Accountability Systems*

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**11-75**

**Event Description**

While on an automatic aid working a residential structure fire, poor use of radio communication was experienced. Crews were advancing a 1 3/4" line on the first floor of a two story house on a basement from the Alpha side to the Alpha/Bravo corner. My crew of four was advancing a 1 3/4" line from the Charlie side back door to the Alpha/Bravo corner in the basement just below the crews above. My crew was experiencing heavy smoke and heat conditions while advancing to the seat of the fire. Once the fire was knocked down, several attempts were made to notify Incident Command of the conditions of the fire but were unsuccessful due to the amount of heavy radio traffic. It took several minutes to get through to Incident Command to notify them that the fire was out and overhaul was being performed.

**Lessons Learned**

If a mayday would have occurred, it possibly would not have been heard due to the heavy radio traffic. The Safety Officer on scene giving out command tasks and firefighters were talking on the radio without any specific reasons. My suggestion would be that only Company Officers in charge of a task given by Incident Command should be transmitting information to Command post. Fire fighters should relay information to their Company Officers face to face and remain off the air unless there is a danger or mayday that needs to be relayed to Incident Command. The Safety Officer should only be the eyes and ears for the Incident Command and remain off the radio unless there is some information that the Incident Commander may need to know. Communication is the key to all incidents. Poor communication can easily turn into a bad day for a fire fighter if they are unable to get through to Command when in danger.

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**10-896**

**Event Description**

Brackets [] denote reviewer de-identification.

On [date and time deleted], my department's radio communication malfunctioned and transitioned into a fail-soft mode. Under fail-soft mode, the radio system remains functional and fully capable. However, on this day, the fail-soft mode did not function correctly and our entire communication system citywide malfunctioned. We did not have station alert capabilities nor were we able to communicate with our dispatch center. After further investigation, it was determined that the radio system was out of service for 2 1/2 hours. If fire crews had been dispatched or were on a working incident, firefighter lives could have been at risk. The radio malfunction compromised our radio's

emergency activation capabilities. If a firefighter had been in a mayday situation, they would not have been able to communicate.

### **Lessons Learned**

Develop a protocol that directs personnel on what to do in the event this situation happens in the future. Have a secondary communication system that can be activated if/when the primary system fails. Seek a partnership with other emergency response agencies about borrowing a temporary frequency while repairs are made.

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**10-725**

### **Event Description**

The fire was reported as starting on the deck at the rear of the structure, and had burned into the structure. The structure was a single family dwelling, ranch style house with a walk-out basement. The deck was approximately 12 feet off of the ground. Two firefighters made entry through the front door. The fire was straight back in the dining room area and had burned into the attic. The initial attack was made on entry and then the crew progressed through the structure to the rear and turned the hose stream into the attic area. The second firefighter on the line stepped onto the deck and one leg fell through, at which point the nozzleman caught the firefighter and pulled him back up onto the deck, and into the structure.

### **Lessons Learned**

First of all, communication is key. The firefighter did not hear the information from dispatch stating that the fire started on the deck at the rear of the structure. Had he heard this, he may not have stepped onto the deck. After the firefighter had fallen through the deck, the information was passed to the other firefighters inside, but the information about the integrity of the deck, or the fall was not immediately reported to command. The information about the integrity of the deck was reported to command after the interior crews exited the structure and had walked around to side "C", some 10 minutes later. Anytime that there is a condition that may cause injury or affect operations, that information should be reported to command immediately. Even though the crews inside were told directly, when they exited and new crews were rotated in, the information was not relayed to the new crews.

The firefighter did not sound the floor of the deck to determine if it was solid. We need to watch our footing at all times.

We were lucky and the firefighter was not seriously injured; only minor scrapes and muscle fatigue. However, had he stepped in a different area, or had the nozzleman not reacted quickly, the firefighter could have fallen 12 feet into live fire and other debris.

**09-633**

**Event Description**

Units responded to a basement fire in a single family ranch type structure. An acting officer and firefighter entered through the front door on the 'A' side and proceeded to the 'C' side through the house to gain access to the basement stairs. They attacked the fire in the basement unsuccessfully with a 200 foot 1 and 3/4" line. The fire was fueled with gasoline stored in the basement. When low on air, they withdrew back through the house. The officer fell through the floor near the front door on side 'A'. The RIT team staged in the front lawn saw this and immediately attempted to pull the officer from the floor. The basement fire vented through the hole in the floor and around the officer. It was difficult to remove the officer from the floor due to the fact the SCBA waist strap was not fastened.

The officer had severe burns. The turnout gear worn was 15 years old and was made for someone else. The officer's gear was so hot it was difficult to remove.

**Lessons Learned**

Tactics and communications could have been better. This should be addressed in future training.

A second crew was freelancing in the attic, got lost, and ran out of air. They called a mayday at the same time of the extrication for the officer. Better accountability is needed.

PPE- Turnout gear was old 14 years old and ill fitting for the officer. SCBA waist straps were not fastened.

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**09-16**

**Event Description**

While crews were operating at the scene of well-involved, two-story house fire, the decision to switch to defensive mode was made by the IC. My crew and two other units were operating on the first floor at the time of this notification, so we exited from the "B" Side and were walking towards the front of the structure. Smoke was laying low and visibility was minimal. We suddenly heard the sound of a [master stream] spraying the upper part of the structure. Less than five seconds later the top of a chimney, weighing approximately one hundred pounds, fell through the smoke and crashed in between one of my firefighters and me. The space between us was no more than five feet. If this had hit either one of us we would have been killed or crippled.

## **Lessons Learned**

The decision to deploy the elevated stream up was made by the IC without checking personnel locations or performing a PAR as per SOP.

When changing from offensive to defensive modes, priority should be to account for all personnel before master streams are directed at or into involved structures.

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**08-129**

### **Event Description**

At 1308 the Fire Department received an alarm for a natural gas leak at a near-by business with a report of 25% LEL inside the building. The cable company outside of the business had struck a natural gas line next to the building. The on duty crew responded with 4 personnel: Ladder, Engine, and Rescue. Once the crews arrived on scene, they had their gear on and then donned their SCBA. While investigating the leak, the readings on a four gas meter were anywhere from 11 to 28 PPM. They knew the situation was serious. The leak was on the D side of the building where the two firefighters were investigating. In the mean time on side B, the Engine and Ladder personnel readied the hydrant and prepared for the worst case scenario. The firefighters coned off the parking lot where traffic had been continuing while they attempted to keep everyone clear. The medic arrived on scene from a previous call. They became the RIT team in case an event would occur that would require their assistance. While attempting to keep onlookers clear, the D side of the building suffered a catastrophic event where the two firefighters were last seen.

The gas had been pulled into the building by a fresh air intake and found an ignition source causing the building to explode collapse and catch fire. At 1336 followed by a rapidly spreading fire and a brief moment of unaccountability, the driver of the engine quickly got on the radio to establish communications with the two unaccounted for firefighters. The ladder operator began establishing a water source from the hydrant. The RIT team sprung into action to locate their unaccounted for brothers. The mayday sounded. The captain radioed "MAYDAY, MAYDAY, MAYDAY the platoon chief was down". The building had partial collapse. The captain then pulled the platoon chief away from the building after being thrown 25 feet through the air. Both the captain and the platoon chief were within feet of the building when it blew. With falling debris, the captain went back in to get his platoon chief to begin assessing the situation and knew they needed to get away quickly.

The platoon chief and captain both suffered only minor injuries from the blast that threw them 20 to 30 feet from the building. Flying glass also created a problem to their gear and penetrated their skin through their gear but they were alive. Three other civilians also received minor injuries. This was a near-miss to say the least.

## **Lessons Learned**

- The experience and the fact that every single firefighter knew their job and did it.
  - All PPE was worn by the captain and platoon chief which contributed to just the minor injuries.
  - The quick thinking of the on-site safety officer who evacuated the building due to the 25% LEL reading.
  - Having a "worst case scenario" preplan by the firefighters on the scene.
  - A call that has become "Old Hat" but was treated perfectly to prevent injuries and deaths.
  - Knowing your equipment and proper training is the best medicine for going home safely.
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**08-103**

## **Event Description**

Our fire department was dispatched for a possible structure fire in a 1 story commercial brick building after a passerby reported fire visible inside the structure with light smoke showing. The building was occupied by both a restaurant and a drycleaner. The first fire personnel on scene was a deputy chief who arrived within 2 minutes of the initial alarm, assumed command, performed a size-up, and communicated a working fire from the drycleaner occupied part of the building.

As a deputy chief and the department's safety officer, I arrived on scene, advised command I was the incident safety officer for the incident and performed a 360 of the structure to identify any possible hazards. Upon my return to the alpha (A) side of the building, the truck company had forced entry to the structure with the engine company entering with a 1 1/2" line. There was a moderate smoke condition at the time. The fire was located and confined to a commercial dryer. The building was ventilated with PPV and checked for extension.

This was the first fire that the department has had in quite some time. As I was checking, I realized that our accountability procedures were not in place and that I had no reliable information on the number of firefighters in the structure. Not one accountability tag had been placed at the door. We have a two tag system where one tag remains on the rigs and one is left with an accountability officer at the door. Had the incident escalated into a major fire, the IC would have had limited information on the number of personnel inside of the structure. Also, as the building was being ventilated and checked for fire extension there was still a light smoke condition inside of the structure. I observed 50% of the firefighters had removed their SCBA masks and walking around inside of the building. I notified the OIC of the interior to have all firefighters go back on air which they did. The building was then metered and elevated CO was detected. I believe that the excitement of the fire quickly caused the firefighters

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to ignore or forget the department's mandated SOPS on accountability procedures and our current policy on the use of SCBA during salvage and overhaul procedures need to be evaluated.

### **Lessons Learned**

Lessons learned: Eye protection and SCBA should be worn during overhaul situations. Due to the fact that the overhaul was hot and flames were showing, they should have been wearing SCBA.

Suggestions to prevent similar events: Command needs to assign a safety officer and reduce free-lancing through staging officer.

Actions to correct the situation: Review of training standards, proper use of PPE, respect for volunteer fire fighters suggestions and other departments in a mutual aid situation.

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## **06-533**

### **Event Description**

On the afternoon of July 4, 2006, our department was dispatched to a residential structure fire. We responded with 3 Engine companies, 1 Truck company, and 2 Squads. The responding units were staffed with 2 people and there were 2 Battalion Chiefs responding. One of the Battalion Chiefs was on duty and the other responded from his house less than a block away. All other units were staffed with 3 people and another engine was requested later in the incident.

The first Engine arrived on the scene of an approximately 3,500 square foot, two story, wood frame dwelling. There was heavy smoke and fire showing from the first floor and heavy smoke showing from the second floor. This Engine began setting up for fire attack using one 1 3/4" handline and the second engine laid a supply line and assumed RIT duties. The third Engine and Truck Company responded from the same station and arrived at the same time. The Truck was assigned ventilation, the third Engine was assigned second fire attack, and one of the Squad companies was assigned search and rescue. The on duty Battalion Chief [A] established command and Battalion Chief [B] was assigned operations.

The first arriving Engine was attacking the fire in division one while the third arriving engine went to division two. They encountered heavy fire and high heat conditions. The fire was growing in size and intensity so command ordered a defensive attack. No evacuation warnings were given (air horns). I saw division one fire attack search crews coming out the house. As they exited, the Battalion Chief in charge of operations called for an aerial master stream. The stream was directed to the second story through a side window. The master stream hit the division two fire attack team knocking them down the stairs and injuring two firefighters. After command contacted the crew, the RIT was sent in to assist them with egress.

During the RIT Operation, all other operations were stopped. This allowed the fire to continue to grow.

### **Lessons Learned**

- Accountability is priceless.
- Know the crew assignments and number of personnel in the crew.
- When evacuating a structure use evacuation tones – air horns.
- Big fire calls for big water. Don't be afraid to use something bigger than 1 3/4" handlines.
- Engine companies and Truck companies should be staffed with more than three people.
- When going defensive slow down, take time to make time and make sure your people are where they are supposed to be.

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**06-114**

### **Event Description**

My department is a POC (paid-on-call) department with approximately 60 firefighters. We were toned for a barn/garage fire. At first, I was not exactly sure as to what type of structure (was on fire). An improper NIMS-based size-up was inconclusive at best. Not yet the worst (problem) of the afternoon.

Upon arrival, I saw a larger pole barn with smoke showing “Charlie” Side and our mutual aid department working with our first out engines. I kept my crew intact at the truck, at staging, awaiting orders from IC, typical protocol. I was then asked to bring my crew up for a simple task where I then began to understand we had some major problems. These problems sent me on this mission.

Our mutual aid department had a firefighter in that structure without SCBA. Even though a large door was opened for ventilation, what about flashover, explosive gases, liquids or collapse?

Last time I checked, a structure of this sort potentially contains chemicals, fertilizers and paints; not to mention carbon monoxide, carcinogens and poisons. I state for the record that there was also gas and LP tanks inside.

After further inquiry as to why someone on the fireground would blatantly disregard SOGs and protocols, I was also enlightened to the fact that the firefighter did not tag-in with the IC. NO ACCOUNTABILITY!

Less than one second could have destroyed this firefighter's life and his family's life. I would hope he, and others like him, soon understand the importance and necessity of proper training, understanding and implementing proper protocols, and following

safety guidelines. If not, someday it may not be he that falls to trouble and possibly an LODD statistic, but other personnel due to his lack of following best practices.

This omission of responsibility to departmental, interdepartmental protocols and safety guidelines is inexcusable and unacceptable. I will voice my opinion assertively to my chief officers and city fathers. I feel it is certainly a setback to the industry whose goals are to reduce LODDs and firefighter injuries. However, if there is any good out of this, it does certainly fuel my need to work harder in educating and training my departmental staff about safety and progressive fire service operations. My intent is to use this as “another lesson learned.” Maybe we can keep another brother/sister safe in the future!

THINK! BE PREPARED AND BE SAFE!

### **Lessons Learned**

Proper PPE and SCBA on fireground are MANDATORY and should be donned accordingly. Accountability is a must and is a tool beneficial in keeping departmental personnel and mutual aid personnel in check. A complacent department running mutual aid should seriously consider its actions. Their actions may cause injury to themselves and to other properly trained personnel as well. The fire service today does not have room for complacency, "good'ol days" and "we always have done this" irresponsible attitudes. To impede the chances of injury or LODDs, a department must look into the future and consider the responsibilities and liability in today's fire service. Training nights should be more than a social event. Proper TRAINING IS A MUST! I believe my corrective actions are three-fold.

One: Override any IC personnel to immediately correct similar situations in the future.

Two: Discuss this situation with department chiefs so it will be resolved and reduce the risk of injury in the future.

Three: Continue to train and educate my department relative to fireground safety.

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**05-468**

### **Event Description**

Crews responded to a gas explosion at a grade school. En route, the initial reports indicated the presence of 80 children in the school. Upon arrival, the first in crew was my truck company. We were met by two gas company workers. One was suffering from serious burns to the upper torso and face. The other minor burns to the same area. Heavy fire was showing from the middle section of the school with a large portion of the front of the building destroyed.

One of the injured workers informed us that the children were not in the school. The workers had convinced school personnel to postpone the summer class until they had completed their work. EMS began treating the injured workers.

The first in engine company arrived on the scene and without orders stretched a 2.5 inch handline into the building and advanced to the fire area. While performing his size-up, the I.C. realized that the building was a 1 story non-combustible structure. Due to the explosion, the steel framing was exposed to heavy fire impingement. The I.C. recognized the collapse potential and ordered engine crew out of the building, however, the engine company did not acknowledge the transmission.

Due to the negative contact with the engine company, I took my tillerman into the building to extricate the engine crew. We followed the line to the crew's location and found the engine company forcing a door that lead into the fire area. I ordered the crew out of the area. Just as we began to leave the area, fire blew out of the ceiling area above our heads. We dropped to the floor and followed the line out into the main hallway. Seconds later the roof structure in the area we had vacated collapsed and became fully involved in fire.

### **Lessons Learned**

First in crews must perform a proper initial size-up of the fire building and be cognizant of the building construction. First in companies must allow the I.C. to expand upon the size-up and allow the I.C. time to formulate an initial action plan before advancing into the structure.

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## Review Questions

1. Firefighters/EMTs should check their equipment \_\_\_\_\_.
  - a. Every shift
  - b. Once a week
  - c. Once a month
  - d. When told to do so

2. Provide a definition of accountability.

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3. Once a Mayday is called, crew operating should all try to contact the member via radio communications in an attempt to find him/her.
  - a. True
  - b. False