



National Fire Fighter Near-Miss Reporting System:

May 2012 Reports

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Report Number: 12-0000127

Synopsis: PPE protects FF during fall.

Event Description: During a training session, a firefighter/pump operator was pulling LDH from the hose bed to complete the hook-up. As the firefighter was walking backwards to remove the hose, he tripped over a coupling and fell backwards to the pavement. During the incident, the firefighter had on the proper PPE, including a helmet with chin strap in place, coat and turnout pants, boots, and gloves. When his helmet struck the pavement, it came off and then his head struck the pavement, causing a minor laceration to rear of his head.

Lessons Learned: Proper PPE was in place, but it is not clear if the chin strap was tight during the incident. Situational awareness regarding the location of the LDH coupling would have been helpful.

Report Number: 12-0000128

Synopsis: Saw blade breaks during drill.

Event Description: We were conducting a probationary firefighter evaluation on the drill ground. The test included the candidate, three evaluators, and one assistant. The evaluators were standing behind the firefighter and the assistant was standing down range of the saw (approx. 30 feet). All participants were wearing full PPE and steel toed boots, safety glasses and gloves. The assistant was wearing a wildland coat, boots, gloves, and safety glasses.

One of the skills was to simulate the cutting of security bars on a window using the saw confidence prop.

As the firefighter was cutting the rebar at shoulder height, he inadvertently twisted the saw so that the blade bound in the saw prop. This immediately caused the saw to be forcibly ejected from the prop, sending it up and over the firefighters head. The blade shattered, sending the pieces, invisible to the eye, flying downrange of the saw. The firefighter quickly disengaged from the saw sending it in a safe direction where it came to rest on the ground.

No one was hit by flying debris or was otherwise injured, so all parties began to investigate damages to the saw. It was then that we started to notice how far the pieces of the blade had traveled.

In hindsight, the assistant was not standing in a good location, as pieces of the blade flew past him on both sides (although he didn't know it at the time). The assistant felt adequately protected, although there is no way to know what damage the saw pieces may have caused, or what their aerodynamic characteristics were. Even though he felt he was observing from a safe distance, there were blade pieces 70 feet behind him.

The evaluators who were behind the candidate were in a better location, although the still running saw landed closer to them due to the over-the-head route it took in the candidates hands.

Lessons Learned: Things happen faster than you can react to them. We all get very comfortable around our firefighting tools and although I don't think we were lax, we definitely did not give them the respect they deserve.

Never stand down range of the circular saw and keep a close watch on your partner who is cutting. Watch the angle of the saw and give him/her a firm signal to let off the trigger if you are in doubt.

And finally, as though we even have to say it, wear proper PPE for the task you are performing.

Report Number: 12-0000130

Synopsis: Two simultaneous fires create confusion.

Event Description: A first alarm assignment consisting of three engines, a truck, a heavy rescue, and a district supervisor (assistant chief) responded to a report of a fire in an apartment. When the first arriving engine was only blocks away from the reported fire, dispatch advised of a second apartment fire only two blocks from the first with smoke in the hallway. The first engine was at a critical decision point because the engine was in the intersection less than a block from the second fire with a second engine only a few blocks from the first fire. If the first engine was going to divert knowing the second engine was near the first fire, it needed to happen at that intersection. The captain decided to turn for the second fire knowing the second engine was only a few blocks further away from the first fire. This decision was supported by the assistant chief who also asked for an additional alarm to support both fires.

However, several pieces of information were missing that would have helped develop the fire department's situational awareness and led to different decisions.

- Dispatch failed to tell units on the first dispatch that the fire was reported by police officers on scene that were responding to a disturbance at the fire apartment and noticed the fire after being on scene for a few minutes
- Dispatch failed to tell responding units that the first fire had two child victims
- Dispatch failed to tell units responding to the second fire that it may be criminally connected to the first fire and started by the suspect being pursued from the first fire

Had the captain of the first due engine to the first fire known about the victims, he would have continued to provide initial patient care (law enforcement had already removed them) instead of diverting to the second fire. Ultimately, the difference in patient care was less than 30 seconds of when the first engine could have provided care so it didn't make much difference but it was part of the decision process with less than ideal situational awareness.

The first engine at the second fire arrived to find smoke in the first floor hallway and charring on the outside of an apartment door along the doorjamb. The signs didn't completely fit the situation of heavy fire in the apartment but, given the available information, it was decided that the apartment behind the charred door likely had a significant fire to cause the charring on the outside of the door along the doorjamb. The captain went back out to assist with pulling a line and collecting tools. As the captain

came back down the stairs with his crew toward the apartment with a line, he witnessed a police officer preparing to kick in the door to the apartment with his gun drawn. The captain ordered the officer to stop kicking in the door under the assumption that the officer would be subjected to high heat conditions. The officer became irritated and said something unintelligible to the captain. The crew forced the door open to find a clear apartment. In hindsight, the suspect had hung a burning shirt on the door handle, which caused the charring along the doorjamb and smoke in the hallway. The police officer thought the suspect may be in the apartment and was irritated because he thought we were placing ourselves in danger by not wanting police support.

Lessons Learned: Our dispatch center covers a large geographical area for 56 agencies consisting of fire, EMS, and law enforcement. This near-miss is not meant to place blame on the dispatchers who are understaffed working in a less than ideal system that does not provide sufficient training but on the operational system of the dispatch center. However, better communication between dispatch and fire units would have dramatically improved situational awareness. While not intimately familiar with operations there, I have sat in with the dispatchers and feel that it is possible to improve the workflow with different console organizations (human factor considerations that fit the thought and work processes); increased staffing; and, focus on assignments by discipline instead of having dispatchers constantly switch between fire, EMS, and law enforcement.

When something didn't fit, I should have asked questions. We have a problem with law enforcement breaking/opening doors to fire areas and making apartment hallways less tenable while placing other residents in greater danger (as happened at the first fire in this incident). This was my assumption in this case; except, I should have asked why he was doing it with his gun drawn. I let previous experiences cloud my current assessment of the situation.

Report Number: 12-0000131

Synopsis: Hydraulic tool injures FF during training.

Event Description: Personnel were performing training with hydraulic rescue spreaders. The evolution involved spreading a hinge on a closed door. During the evolution the tool operator had taken a position so he would not be struck if the tool moved suddenly. A firefighter performing back-up duties was positioned behind him with his hand resting on a vehicle parked parallel to the first, approximately, four feet away. While spreading the hinge, the tool "ejected" from the hinge and traveled backwards with the base of the tool striking and fracturing the back-up firefighter's left hand.

Lessons Learned: Be aware of all the surroundings. The initial brief discussed precautions to take to ensure the tool operator was not struck or caught by sudden tool movement. Create all the space that you can, particularly in training. Use observers to watch the whole scene and look for personnel who may place themselves in the line of fire from various parts of the tool.

Report Number: 12-0000132

Synopsis: Roof collapses during entry into building.

Event Description: Upon arrival at the incident, there was a failure to size up the scene and almost cost the lives of three firefighters. The roof collapsed on us and we were trapped. Another crew of three firefighters almost didn't make it back out as well as they were making entrance through the front door as the roof was coming down.

Lessons Learned: Upon arrival on scene the first thing to do is recognize the hazards that may be encountered. Conduct a 360 of the area and ensure that all information is passed down to the arriving companies.

Report Number: 12-0000133

Synopsis: Wires entangle FF looking for extension.

Event Description: Companies responded to a report of fire in a small single family dwelling. Upon arrival, it was determined that the fire was in a storage room on the rear of a one thousand square foot house. A primary search revealed light smoke conditions on the interior, but an inspection of the attic revealed fire extension into that space. The attack line was relocated to the interior as soon as the bulk of the fire was knocked down. One firefighter accessed the attic by the pull-down stairs and opened the nozzle to finish off the fire. When he did, the firefighter either lost his balance or a step broke under his weight. When he lost his balance, he lost his helmet, the line, (which became entangled in the neck strap of his face-piece), and his face piece. There was still a large amount of heat in the attic and the firefighter tried to climb down, only to discover he was entangled in A/C duct reinforcement wire. High heat and smoke continued to push down out of the attic access hole. There were several firefighters already next to the entangled firefighter and rescue efforts commenced immediately. When it was discovered that the trapped firefighter's face-piece was entangled, another firefighter attempting the rescue took off his mask and passed it up. After two or three minutes, the trapped firefighter was disentangled and taken out of the building. Both the trapped firefighter and the firefighter who surrendered his face-piece were treated on the scene by EMS personnel already on standby. Neither firefighter had significant effects from the smoke exposure.

Lessons Learned: When accessing an attic space, do not rely on pull down stairs. Reinforce them with attic or folding ladders. When accessing an attic, do not enter it unless it has been ventilated. All firefighters should have tools in their pockets to use for disentanglement of themselves or fellow firefighters. Firefighters should resist the temptation of surrendering their own air supply for the benefit of a firefighter in distress. Crews should practice emergency air replacement and resupply, in tight quarters and with poor visibility, using tools available to them.

Report Number: 12-0000134

Synopsis: Patient attempts to bite caregiver.

Event Description: We hear it all the time. “WEAR YOUR PPE!”, and “DON’T GET COMPLACENT!” Fortunately for me, when I got complacent and did not wear my PPE, I got a close call instead of a surprise bacteria-filled human bite. At 13:00 hours the Communications Center received a call from a well-intentioned passerby for a man down. Upon arrival, he was difficult to find, so I had the crew wait in the engine while I looked for him on foot. Eventually, I found a person sleeping peacefully under a tree. As the crew came over with the engine, I woke him up and started asking questions to confirm he was OK. As the captain, I knew I was not going to have any physical contact with this person as the medics were right behind me. All I needed to do was stand back, document, and explain what was going on to the EMT ride-a-long. I was in my T-shirt, without gloves, EMS coat, or eye protection. His responses were bizarre and unrelated to the questions he was being asked. At first glance, he appeared to be a psych patient who was not under the influence. When it became apparent that he did not know what planet he was on (much less answer the orientation questions), we decided a trip to the hospital was in order. Because he was refusing transport, the police department was requested to issue an involuntary hold on him. Three officers arrived and, after their attempts to convince him to go to the hospital were in vain, they decided to issue the involuntary hold and send him against his will. Three officers were not enough to subdue this scrappy, wiry man. Three officers, my two firefighters, and the two ambulance personnel were still not enough. He was prone and had both his hands under his chest. An officer was on his left arm, but nobody was on his right arm. I jumped in. I grabbed his right arm and pulled it out from underneath him. In the process, he bent his head down and attempted to bite my forearm. I felt his teeth graze across my skin as he got a mouth full of arm hair. Immediately, he made a loud slurping sound as if preparing to spit at me. My face was one foot from his and he had a clear shot. Fortunately, one of the officers immediately grabbed his jacket, put it over his face, and (gently) directed this gentleman’s head into the dirt. Infection number two averted.

Lessons Learned: Often times, we learn the most by witnessing what not to do. That’s exactly what happened for the EMT student as I explained in detail the mistakes I made on the call. I told her “Don’t get complacent, and please, always wear your PPE”.

Report Number: 12-0000135

Synopsis: Halligan strikes FF in chest during training.

Event Description: During a search and rescue training exercise in our multi-story training tower, a firefighter was struck in the chest by a halligan bar that had fallen from the second story mezzanine level down to the tower floor. The halligan was set against an open railing while resetting the rescue dummy for the next evolution. The dummy bumped into the halligan, knocking it through the railing. Another firefighter, seeing the tool fall, yelled to the members below to watch out. The tool flipped and fell adze/pick end first, with the pick striking the firefighter in the chest. The injured firefighter was not directly involved in the training exercise at the time and was not wearing his helmet and was in normal station wear. It’s interesting to note that the injured firefighter looked up upon hearing the warning and,

had he not done so, the tool would've likely struck him on top of his head instead of his chest. The impact ripped through his button down shirt and t-shirt simultaneously. Luckily, the firefighter suffered only minor injuries, some mild bleeding initially with bruising, and a scar noted afterward.

Lessons Learned: Wear your PPE where applicable. At any point on the training ground, a minimum of helmet and gloves should be worn. Those not directly involved in a training evolution (i.e. members on-deck for the next exercise, helpers, etc.) are still at risk from falling objects when crews are operating above them. Provide fall protection for open railings in training towers. We have since placed sections of chain link fence, secured to the railing, at every landing.

Report Number: 12-0000136

Synopsis: Air shore fails during trench training.

Event Description: During trench rescue training, an air shore launched out of the trench almost striking several members who were standing at the edge of the trench watching the training. The shore was being used to secure the corner of an "L" shaped trench. The support bracket for the corner panels was made of aluminum as were the air shores. When pressurized the air shore held for a brief second and then slipped off the bracket sending one end of the shore out of the trench

Lessons Learned: 1) Minimize personnel around the training area.
2) Ensure everyone is in a safe area prior to shooting air shores.
3) Ensure materials are comparable (there should have been a wood surface mounted to the bracket).
4) Ensure proper command and control is in place.

Report Number: 12-0000137

Synopsis: Driver almost backs over FF.

Event Description: We responded to the report of a bathroom fire. When the police got on scene they said it was spreading into the ceiling. I was on the engine that was supposed to stage on the hydrant on the opposite side of the busy four lane street. When we got there they had the fire under control and we were told to back into a store next to the hydrant. I went to the back to put the pike pole away, which requires opening a cabinet and then lifting the 2 1/2" hose. Once the cabinet is closed you have to reattach the cover for the supply LDH. To do this I had to stand on the back of the apparatus. The owner of the store came out and asked me if we could at least move our fire engine out of their way so they could have people leave their store. I said that I could not move it and he would have to talk to the driver. Then all of a sudden I heard the backup alarm on my engine. I jumped off just as the person that was supposed to be backing up then engine got to the back and yelled to stop as I landed on him and the driver shifted out of reverse. Our engine almost backed up with me on it and would have ended up knocking me off and running over both me and the backup person.

Lessons Learned: The lesson learned to prevent a similar event would be to make sure you always have the backup person at the back before you start putting the truck in reverse and if you are the person on the back, either get off fast enough so you don't get run over, or hold on for dear life.

Report Number: 12-0000138

Synopsis: Falling power lines pose threat.

Event Description: E [1] responded to wires down. On arrival, the low voltage wires were burning and there were high voltage power lines down two poles further down the road that were energizing the low voltage wires in our view. The engine was spotted a bit too far into the incident as the vehicles on the roadway began to stop behind our engine directly underneath the wires involved. The captain went up ahead of our engine to investigate the reported wires down. The wires above us in our area were intact but burning. The captain directed us to back the vehicles up and close the road way. As I began to speak with the driver of the first car in line behind our engine, advising him to back up and that the road was closed, the low voltage wires that were burning dropped to the ground making a very loud "pop" before striking the ground. The wires landed on the vehicle behind the engine and hit the ground exactly where I had been standing while attempting to get the vehicle to backup. The vehicle was dented and the driver's side mirror broke off. The two bundles of wires that dropped to the ground could have been energized and they were extremely heavy. It was a near miss.

Lessons Learned: In that situation I would have spotted the engine at least one pole before the incident and not essentially in the middle of the event. The vehicles would not have had the option or ability to stop beneath the wires in question. I would have also attempted to advise the drivers of any vehicles underneath the wires in question by yelling at them instead of coming close to their vehicles in the potential danger zone. Hand signals might have also worked.

Report Number: 12-0000139

Synopsis: Quick attack saves FFs in flashover.

Event Description: Crews responded to a working attached garage fire that had extended to a living area/room above the garage. A 2 and 1/2" line was used to knock down the bulk of the fire in the garage and to attack the front of the upper floors and attic. Then a hand line was stretched inside to the second floor to extinguish the remainder. As firefighters were advancing on the second floor, down the hall to the fire room, several skylights were broken out to vent the black smoke. The heat increased and as firefighters made it to the room, it flashed over. An officer from the exterior saw firefighters in the room with full involvement and opened the 2 and 1/2" line into a window, darkening down the fire. Firefighters mopped up hot spots and overhauled the attic without further incident. Firefighters had no reported burns but equipment showed excessive heat.

Lessons Learned: Flames can kill firefighters a lot faster than steam will ever burn them. Spraying water into a room with fire fighters inside is not recommended. In this case was very advantageous. The quick application of water may have saved their lives or eliminated injury. Discussion around when and how this should be done was an important component of this debriefing and lessons learned. A better understanding of air tracking (fire and smoke behavior), and ventilation techniques would reduce the chances of this happening again.

Report Number: 12-0000140

Synopsis: Loose SCBA strap is an entanglement hazard.

Event Description: Companies responded for reported structure fire. First arriving companies observed and reported smoke showing from the 2nd floor of a two-story, wood frame dwelling that had been converted to multiple apartments. The first engine established water supply per SOP and established command while the second engine supported the hydrant. I arrived immediately behind the first arriving crews, parked my vehicle in a driveway across the street where I could best observe the incident and assumed command from the first engine officer.

The crews from the two engine companies pulled a 1 3/4" attack line and 1 3/4" back-up line from the first engine per SOP. There was a flight of stairs with a change of direction landing that led to the entrance door for the second floor apartment. Light smoke was showing from the door. As the first engine crew was advancing up the stairs, I observed the officer's SCBA waist strap (which was not buckled) wrap around one of the vertical spindles on the stairs as he was making his turn at the landing. His forward momentum was stopped momentarily, causing him to go off balance for a split second. The strap unwound from the spindle, and he proceeded up the stairs without incident.

During the after action, I mentioned what I had observed. The officer stated that in his haste to get into the apartment he did not recall getting caught or stopped during the climb up the stairs.

Lessons Learned: 1. Dangling SCBA waist straps are an entanglement hazard. Buckle the straps and wear SCBA properly. A review of training bulletins and the manufacturer's information calls for the straps to be buckled.

2. The officer's failure to remember the event was a sign that his situational awareness was diminished. From my viewpoint, he was clearly stopped in his tracks and off balance for a split second. Members need to refrain from getting so caught up in the moment that they are not processing what is happening.

3. Emphasizing the importance of wearing equipment properly is imperative and an ongoing necessity.

Report Number: 12-0000141

Synopsis: Firefighters burned worse than originally thought.

Event Description: The fire suppression attack crew of three firefighters made entry in a two story residential structure side "A" front door, with heavy fire on second floor. Upon advancing up interior stairs with 1 3/4 hose line, the crew encountered extreme heat and fire. The nozzle firefighter was unable to advance further and stated he was being burned. The second firefighter took over the nozzle operation. The same conditions were encountered, and the second firefighter was pulled back to a supporting position. The original third firefighter took over nozzle operations and attacked the fire from the stairs until additional personnel arrived to assist.

The two firefighters who had stated they were being burned were checked after exiting the structure and determined to have minor burns at first, but those burns developed into second degree level. Firefighters were then transported to trauma/burn center by ground for evaluation and care and released later the same day. There was a delay in exiting the structure, as the firefighters did not feel as they were burned.

PPE was secured by IC and documented by department safety officer (unable to release PPE condition at this time).

Lessons Learned: Currently, the department is still gathering witness statements and evidence but appears that firefighters had all PPE in use. It has not been confirmed yet if all PPE was correctly used though.

Lesson learned: incident reinforces the importance to recheck all PPE for correct and proper use and to check other crew members before entering structure.

Report Number: 12-0000142

Synopsis: Problems arise at community event.

Event Description: Our department was asked to help park cars and help with any problems with fire and or extrication at a community event. We have done this for the past four to five years. This year, I asked to bring my personal ATV to use so we did not have to drive one of our trucks into the arena. The event was going well. The first two heats there were no problems. Then on the third heat, a small fire required that the ATV roll out, but we did not have to use it and put it back in place. During intermission the fire department was supposed to come out and do a dance off. While one other FF and I on the ATV drove out into the arena, I heard and felt a pop in the right rear. I looked back, as I felt the ATV was going to flip, and grabbed the other FF and pulled him towards me as it turned onto its side. No one was hurt so we turned it back over, put the tools back in, checked them, and drove it out. We went back to staging till the event was over. The next day I checked out the ATV and found that the back shocks were bad.

Lessons Learned: Lesson one is to wear your seatbelts. Two, check your equipment better and be more familiar with your surroundings.

Actions to correct: Do a 360 of whatever you are driving and/or operating to check for anything that needs to be looked at/fixed before use.

Report Number: 12-0000143

Synopsis: Welds break on aerial during fire attack.

Event Description: After arriving at a working structure fire, Truck [1] was ordered to deploy its ladder to protect an exposure. As the ladder pipe was charged it ruptured at a weld and the nozzle jerked hard. The engineer immediately shut the pipe down and other means of exposure protection was ordered. Back tracking to the last repair ordered on Truck [1]: Two weeks ago the unit was involved in an incident where the ladder was bedded with the nozzle facing down striking the top of the cab. On inspection of the ladder and nozzle it appeared that only the two lower lag bolts needed repair. The fleet tech came out and inspected the ladder and replaced the bolts. There was no further damage noted.

It is not common practice to flow test portions of the truck when a very minor repair is completed and in this case the flow test was not completed based on the amount of damage. Daily inspections do not include setting the ladder up and flowing the pipe every shift.

After the investigation it was found the impact of the nozzle cracked numerous welds with hair line fractures, thus weakening the welds. Once the pipe was charged the cracked welds failed further. If there had been a failure of the remaining bolts, the entire nozzle attachment could have launched from the ladder, possibly hitting a firefighter or civilian.

Lessons Learned: 1. Always flow test anything that will be pressurized or raised in the air even if down the line from the main pump. Crews thought it was a minor issue requiring minor repair and the fleet tech missed the cracked welds. How many times has the fleet tech come in and given the crew a thumbs up after repairing something and stated, "You're all set! Just a little bolt needed to be replaced"?

2. Always look at damage as an iceberg effect and trace the impact, strain, or compression to other parts of the equipment, or in this case the truck's ladder pipe and ladder.

3. The crew documented the incident in our electronic system properly when the incident happened and the fleet tech arrived quickly to repair the damage. Since the issue was handled so quickly, the reviewing members overlooked the incident in the system and there was no follow up.

Report Number: 12-0000144

Synopsis: Routine gas leak turns potentially deadly.

Event Description: On [date omitted] at approximately 10:00am, my department was dispatched to a reported gas leak. While en-route we were advised that, the source of the leak was outside the structure. Upon arrival, we staged our engine three houses away from the structure in our direction of travel (south) with a moderate wind out of the east. The officer and firefighter, with full PPE donned, approached the residence and advised dispatch that we were staged and we had a two-story, single-family dwelling with nothing visible and announced that we would be in the investigative mode.

The officer spoke with the lead worker in the front yard of the structure. We were advised that they were working on the foundation and, while digging, they struck a gas line. The hole in question was identified, the workers were asked to move down the street, and the residents were evacuated. The

engine was moved two houses away and the firefighter stretched a 1¾ inch bumper line for protection. Once this line was charged the officer donned his SCBA face piece and moved in to investigate the leak further while the firefighter, also with SCBA face piece donned, covered the officer with the charged line. Once the location and severity of the leak was confirmed, both the officer and firefighter moved out of the area and came off air. The leak was from a gash in a two inch gas line.

At this time, command was established and a second engine company was requested. The adjacent residences were also evacuated, a perimeter of 500 feet was established around the leak, and the local gas company was requested to respond. We also advised dispatch that we would be moving into the defensive mode. The request for a second engine also brought our Duty Chief. Volunteers on home response would staff the second engine so there was enough time to establish and secure the perimeter and come up with a solid plan for the mitigation of this incident. Upon arrival, the second engine was staged at a hydrant and the officer was briefed on the situation. The plan was for the first engine company to make entry and utilize a gas clamp to mitigate the leak while the second engine company served as a RIT team and manned the charged hose line. Command was passed to the Duty Chief and an ETA was requested of the gas company, but no ETA was available.

The entry team, staffed from the first engine company, went on air and entered the hot zone and dispatch was advised we were moving into the offensive mode, we began digging out around the line to make room for the clamp and what we thought was a root was found to be in the way. The firefighter who was digging first advised the officer of his find and the officer told him to take a break while he took over. Once kneeling over the hole, the officer found the firefighter's assessment to be correct and started using the blade of the shovel to cut the root. After two strikes, sparks began flying and the officer rolled away from the hole. The officer and the firefighter evacuated to the warm zone with the RIT team, at which point the officer visually inspected the area to find the source of the sparks, but nothing was found.

The entry team re-entered the hot zone to get a closer look. Once back at the hole, the officer used a gloved hand to brush away dirt from the root and found it to be a residential electric service line. The area was again evacuated and dispatch was advised we were moving back into the defensive mode, at this time we also placed a request for the electric company to respond. The gas company arrived and dug up the gas line in a different spot, away from the electric line, the line was clamped shut, and the electric company addressed the electrical hazard. All hazards having been addressed, the incident was controlled and all companies returned to service. No injuries resulted from this close call, but a lesson in situational awareness and expecting the unexpected was learned by all responders on scene.

Lessons Learned: 1. Get wind direction and speed prior to committing your apparatus to a certain direction on the street.

2. A clear and concise size-up is critical to providing a clear picture to additional responding units

3. Establishing and securing a perimeter is vital to protecting the public as well as firefighters.

4. It is easier to evacuate a structure before something bad happens rather than wait until you are trying to fight a fire to do so.

5. The IAP must be clearly passed to incoming units and during the IC briefing.

6. A clear definition of your stance (I.E. Investigative, Offensive, Defensive, Transitional) must be voiced and understood by all on scene and by dispatch.

7. We have plenty of drinking water on the truck; we do not however have any replacement skin or lung tissue. Wear your gear and wear all of it, the right way.

8. Have a RIT team in place before conducting an offensive operation in a potentially IDLH atmosphere.

9. Try before you pry, or in this case, know EXACTLY what you are about to cut before you cut it. Some actions cannot be undone.

10. Maintain crew integrity while in IDLH environments, even if that means you are outside on a bright, clear, sunny day.
11. Complacency kills, always be on guard for the next bad thing that could happen.
12. No matter how many precautions are taken, there is no replacement for situational awareness and being prepared for the worst.

Report Number: 12-0000145

Synopsis: Tire fails on tender during training.

Event Description: One of our drivers was doing driver training in a tender with 3500 gallons of water. The driver heard a LARGE boom and realized the front left tire had blown. He did not hit the brake, and was able to coast to a stop along the roadway.

Lessons Learned: Anything can happen. Make sure experienced drivers operate the most dangerous rigs. Don't drive with one hand on the wheel, and ALWAYS wear your safety belt.

Report Number: 12-0000146

Synopsis: Safety zone intrusion occurs on MVC scene.

Event Description: We were operating at the scene of a two car collision involving a compact car and a passenger van on the parkway headed south. We were all wearing our highway safety vests. All three lanes were closed appropriately by an engine, two police cars, a chief's vehicle, a tow truck, and three ambulances (one of which was in the opposite side of traffic with another police vehicle). I and three other members were spreading absorbent on the road to clean up a spill while EMS tended to the two injured victims, both of whom needed to be boarded and collared. Suddenly, out of the corner of my eye, I saw a civilian SUV coming towards us.

The vehicle had driven around our roadblock onto the right shoulder grass, cut back into the middle lane (just missing the state police car and the chief's car), and accelerated through our accident scene at close to 60mph. In doing so, it kicked up a cloud of dust from the absorbent and narrowly missed me and the other members. The SUV driver didn't even slow down to look. The worst part was the vehicle had a flashing blue light on the dashboard and a Maltese cross sticker on the back window, indicating that the driver may have been a firefighter. Everyone froze in place for about 15 seconds.

After making sure nobody was hit, we completed our assignments and "everyone went home". The engine chauffeur (who had the truck across all three lanes) didn't even see the SUV until it was past the truck, which was too late to warn anyone. It was one of the scariest moments I've ever experienced in my 11 years as a firefighter. We found out later that there were no active calls in the departments that served the area where that person was heading, so the SUV driver apparently just used the blue light to get past the accident, putting fellow brothers at risk. It is unknown if the police ever caught up to the vehicle, but my chief made notifications to the surrounding fire departments about this supposed member.

Lessons Learned: Just because the road looks closed and "safe", doesn't mean it is! If people want to get through, they're going to find a way. Always keep your head on a swivel, even into the oncoming lanes of traffic. If another car had lost control and struck the guardrail, it would've been bad.

Report Number: 12-0000147

Synopsis: Attic stairs put FF in adverse situation.

Event Description: On [date deleted], companies responded to a report of a fire in a small single family dwelling. Upon arrival it was determined that the fire was in a storage room at the rear of the 1000 square foot house. A primary search revealed light smoke conditions on the interior, but an inspection of the attic revealed extension into that space. The attack line was relocated to the interior as soon as the bulk of the fire was knocked down. One firefighter accessed the attic by the pull-down stairs and opened the nozzle to finish off the fire. When he did, the firefighter either lost his balance or a step broke under his weight. When he lost his balance, he lost his helmet, the line, (which became entangled in the neck strap of his face piece) and his face piece. There was still a large amount of heat in the attic and the firefighter tried to climb down, only to discover he was entangled in A/C duct reinforcement wire. High heat and smoke continued to push down out of the attic access hole. There were several firefighters already next to the entangled firefighter and rescue efforts commenced immediately. When it was discovered that the entangled firefighter's face piece was stuck, one of the firefighters attempting the rescue took off his own mask and passed it up. After two or three minutes, the trapped firefighter was disentangled and taken out of the building. Both the trapped firefighter and the firefighter who surrendered his face piece were treated on the scene by EMS personnel already on standby. Neither firefighter had significant effects from the smoke exposure.

Lessons Learned: When accessing an attic space, do not rely on pull down stairs. Reinforce them with attic or folding ladders. When accessing an attic, do not enter it unless it has been ventilated. All firefighters should have tools in their pockets to use for disentanglement of themselves or fellow firefighters. Firefighters should resist the temptation of surrendering their own air supply for the benefit of a firefighter in distress. Crews should practice emergency air replacement and resupply, in tight quarters and with poor visibility, using tools available to them.

Report Number: 12-0000148

Synopsis: Lack of a size-up puts FFs at risk.

Event Description: Upon arrival at an incident, we failed to size up the scene and it almost cost two firefighters and I our lives. The roof collapsed on us and we were trapped. Three other firefighters almost didn't make it back out as they were making entrance through the front door as the roof was coming down.

Lessons Learned: The first thing to do when arriving on-scene is to recognize the hazards that will be encountered, then conduct a 360 of the area and ensure that all information is passed down to the arriving companies.

Report Number: 12-0000149

Synopsis: Changing conditions cause a transitional attack.

Event Description: During a rain storm, heavy fire and smoke conditions were pushing from the second floor of a two story commercial building. There was a non-operational hydrant in front of building. After conferring with the store manager on the first floor, it was determined that there were no workers or occupants on the second floor. Heavy black smoke was banked down to the top of the second floor stair landing. The first due Truck Company had opened the scuttle over the stairs and a large hole over the main body of fire. This did not alleviate conditions inside the building because the heavy rain was preventing the smoke and heat from lifting. After seeing the color of the smoke change from dark grey to green and the smoke not lifting, I recommended to the incident commander (IC) that all firefighters evacuate from the second floor in preparation for an exterior attack and the IC concurred. A few minutes later, heavy fire was pushing out of the front windows with stock up to the ceiling. The life hazard was us (fire service). At street level we cooperated with a full roll call while aerial apparatus were simultaneously being supplied with large diameter hose lines from nearby engines.

Lessons Learned: The safety chief (or designated officer) won't arrive for awhile. It is incumbent that all supervisory personnel at the scene act as safety officers (don't wait for an invitation). Pick the brains of store managers or responsible people who know the building. If you have a bad hydrant, heavy rain, etc., do not let the troops continue to occupy the building. If it doesn't seem right it probably isn't. It is important to find out early if civilians are unaccounted for as it's possible they got lost in the fire area.

Report Number: 12-0000150

Synopsis: Company officer injured inspecting ladder.

Event Description: While doing required ground ladder training, the company officer wanted to verify that the ladder locking mechanisms were working. Apparently, the officer's head was between the rungs and the person raising the ladder accidentally lowered the fly on the officer's head and neck. This caused an injury to the officer and time lost.

Lessons Learned: Verify that extension ladders are locked by stepping away and visually inspecting them. Do not allow any body part between the rungs of a ladder until it is secured.

Report Number: 12-0000151

Synopsis: Roof fails as crew gains access.

Event Description: Crews were dispatched to a structure fire in the afternoon. The first arriving unit declared it a working attic fire, took command, and ordered the ladder company to the roof to vertically ventilate. The ladder crew was making the roof about the same time the engine company was making entry. The ladder crew safely advanced up to the peak of the roof. The engine company on the inside could hear them sounding above them. The ladder captain sounded the roof and stepped up and on to the hip section of the roof. The roof gave way and the ladder captain fell into the heavily involved attic fire. His head and left shoulder were the only parts that remained topside providing a means for the firefighters to pull him out to safety. The ladder crew attempted to call for emergency traffic to advise command of the incident but it was covered by another unit. Rather than continuing to radio command, the firefighter worked frantically to pull their captain out. Once the crew was back on solid roofing, the captain declared the roof untenable and they quickly made their exit to the ground.

Lessons Learned: Situational Awareness - examine the structure carefully for critical fire ground factors like location of fire, warning signs of collapse, best access points, etc.

Command Location - position your vehicle to see the working side of the incident to monitor crews and conditions more closely.

Equipment - quality equipment protected this firefighter from certain harm.

Communication - practice calling "may-days" and "emergency traffic" often and have a plan.

Teamwork - firefighters went to work instantly to pull their captain to safety.

Report Number: 12-0000152

Synopsis: Low air supply forces crew to seek egress.

Event Description: While working on a structure fire, a rookie nozzle man failed to notify others that he was low on air until the vibra-alert had already stopped and less than 30 seconds of air was left in the breathing apparatus. The firefighter stated that the reason why he waited so long to notify others was that he knew of a time when I had put myself in a similar situation and had run out of a structure because the mask was sucking to my face. I informed him that the two situations were different because the fire was already knocked down when I allowed my tank to completely empty but the fire was still active when he ran out of air, making it much more dangerous. Also, the visibility was much worse when he ran out of air and I had to search the walls with my hands to find a window for him to stick his head out of to get air. Still, I realize that I had set a bad example and a rookie firefighter had followed it.

This is how the event played out: The bulk of the fire was knocked down but the environment inside was still IDLH. The nozzle man informed me that he was out of air and I noticed that since the vibra-alert was not buzzing, it meant that he had approximately 100psi of air left in his bottle. I let him know that I understood the situation and took about four steps to where I believed the nearest wall was, and possible egress, leading the nozzle man with me. I swept the wall with my right hand and found a window (if I had not found this window, my next plan would have been to call a mayday). I notified the

nozzle man about the egress and he stuck his head out for air. The house is one-story in the front and three stories high in the back; we were at the side of the house, which was two stories. This confused me at the time before I began studying how some houses are built. The fire was fully knocked down by this time. I notified our OIC about the situation face to face. After the smoke cleared a bit and the environment was no longer IDLH, we all walked out the front door.

Lessons Learned: Firefighters and officers have to remember that their actions are observed and possibly picked up by newer members of the team.

Report Number: 12-0000153

Synopsis: Ladder pipe damaged while nesting the aerial.

Event Description: One of our Quints was flowing water at the scene of a structure fire. About 3 minutes into its operation, a rupture was reported just before the nozzle on the pipe. The Engineer shut the line down, lowered the ladder, and investigated the issue. The Engineer found a large weld crack that opened up while under pressure.

Back tracking what may have caused this we found the following:

1. Two weeks before this event the ladder was lowered during training with the nozzle pointed down. The ladder was in the process of being cradled when the nozzle struck the top of the roof. It missed being detected in the weekly inspections because our daily check-out does not include a full ladder set up with flowing water.
2. The crew responsible followed all of the established protocols for reporting the incident and requesting the mechanic.
3. The issue was fixed within a few hours of being reported. On the initial review, the mechanic found 1-2 damaged bolts that were replaced.
4. Assuming the issue was fixed, the crew did not test the ladder/water pipe assuming that only the bolts needed repair based on the thumbs up from the mechanic.

Lessons Learned: 1. Always view incidents and damage from the tip of the iceberg theory with the assumption that there is more damage than seen on the surface. In this case, there was a hairline crack on the weld.

2. While the reporting protocol was followed correctly, it was handled so quickly that there was not time for a command officer review. We built an additional layer of review since this incident so command officers at some level are aware.
3. Regardless of how minor the repair or damage - always give the piece of equipment a full check out. You never know.
4. There is a sensor that could have been purchased to prevent this type of damage but for some reason it wasn't included in the specifications.

Report Number: 12-0000155

Synopsis: No water in the tank to fight fire.

Event Description: The primary engine of Station [1] was taken out of service (mechanical). The mechanics emptied the 750 gallon tank to be able to lift the engine for repair. The engine was returned and the driver checked the equipment and functionality of the engine and deemed it prepared to be placed in service. He then looked at the tank gauge which showed "full" and then pulled the primer and confirmed he had water in the tank. Approximately six hours later the engine was dispatched to a fully involved structure fire. A 200 foot 1 ¾" pre-connect was pulled for the initial attack (defensive mode). The AO (Apparatus Operator) put the engine in pump and charged the primary attack line. The firefighter on the end of the nozzle bled the hose and immediately lost pressure. The firefighter radioed to the AO to "open the line back up". He was then advised of a problem with the pump. The AO began to troubleshoot the problem. After spending a few short seconds confirming the engine was in "pump" he climbed to the top and shined his flash light into the "tank fill" only to see the bottom of the tank.

Lessons Learned: In order to fill 200 feet of 1 ¾" hose you need roughly 25 gallons of water, plus whatever it took for the pump to pressurize the primary line. It appears that the mechanics did not wait for the entire tank to drain. Also there was an obvious problem with the tank gauge. The human error was the failure to visually check the tank for water. This is a necessary reminder that as much as we rely on electronics in the fire service today, a piece of equipment can fail at any time. Don't put all your eggs in one basket. Train and be prepared to adapt and overcome.