



Grouped Glove Reports

| Report # | Pages |
|----------|-------|
| 06-352 | 2-3 |
| 07-938 | 4-5 |
| 07-768 | 6 |
| 08-090 | 7-8 |

Report Date: 07/06/2006 0743

Synopsis

Fuel spill flashes after car fire is extinguished.

Demographics

Department type: Combination, Mostly volunteer

Job or rank: Lieutenant

Department shift: Respond from home

Age: 34 - 42

Years of fire service experience: 21 - 23

Region: FEMA Region V

Service Area: Suburban

Event Information

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

Event date and time: 06/14/2006 2230

Hours into the shift: 0 - 4

Event participation: Involved in the event

Weather at time of event:

Do you think this will happen again? Yes

What do you believe caused the event?

- Situational Awareness
- Equipment
- Procedure

What do you believe is the loss potential?

- Life threatening injury

Event Description

Our station was dispatched to a vehicle fire and upon arrival found a car with fire in the engine area parked in the driveway of a home. 2 other firefighters and I worked to extinguish the fire and accomplished the task without incident. After extinguishing the fire, we noticed that the key was still in the ignition and, although the engine was not running, the electrical system was energized. Because of this, the fuel pump was active and the line had been burned through. Gasoline was leaking in the engine area. The three of us worked to stop the gasoline leak and noticed that one of the damaged battery cables was arcing and sparking. Despite this, we continued to work to stop the leak. I removed my gloves to try to facilitate crimping the fuel line and getting the leak stopped. At this time, since the fire was extinguished and there was no smoke, all but one of our crew had removed our face masks. As we continued to work, the battery cable arced and ignited the fuel vapors causing a flashover. The fuel that had been running down the sloped driveway was now a river of flame. All three of us at the car were engulfed in the fireball. The handline was lying in the fuel that was running down the driveway, as well as an electrical cord from the engine that was powering a scene light. The fire was quickly knocked down and we used class B foam on the fuel fire. The three of us involved in the flashover were fortunate; the only injury was to one of my fingers, a small cut and burn.

Lessons Learned

The first mistake I made was to not have the battery cables cut to de-energize power. We had tried to remove the key but were unable to due to damage to the ignition. Once we started to look at the battery, we were detoured in our task when we found the leaking fuel line. All three of us concentrated on that task instead of taking out the battery threat. We also did not take into account the fuel that was pouring down the driveway soaking the handline, electrical cord, and pooling near the engine, which was at the end of the driveway. I also remove my gloves, which

could have led to serious burns. After critiquing the incident with fellow responders and the crew, we realized we should have continued with our first task, cutting power to the vehicle. We should have also recognized the threat of the gasoline spilling on the driveway and taken action to apply foam immediately while another crew worked to stop the leak. The engine placement directly at the end of the driveway was not correct. The fuel spill aside, the vehicle could have been in gear or in neutral and rolled down the driveway striking the engine. As for not having face masks on while working to stop the fuel spill, we were not sure that we would do that any differently. Our department does not wear SCBA to mitigate a fuel spill, and once the smoke from the car fire has dissipated, and we are not working in a confined area that would retain harmful contaminants, we usually remove our masks. In the future, when we have a source of ignition as in this case, we will wear SCBA with mask. The decision to continue wearing SCBA will be made depending on the circumstances, with memory of a potentially life-threatening flashover guiding us. Our particular station is very good about wearing full turnouts while working at incidents, even minor ones. The lesson about removing the gloves was valuable since many of us do that. The gloves don't allow you to work with small equipment and pieces very easily.

Report Number: 07-0000938
Report Date: 06/03/2007 1203

Synopsis

Gas tank on boat explodes during overhaul, after fire is extinguished.

Demographics

Department type: Paid Municipal

Job or rank: Captain

Department shift: Other : 24 on, 24 off, 24 on, 5 days off

Age: 43 - 51

Years of fire service experience: 24 - 26

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: 05/21/2007 0350

Hours into the shift: 21 - 24

Event participation: Involved in the event

Weather at time of event: Clear and Dry

Do you think this will happen again? Uncertain

What do you believe caused the event?

- Situational Awareness

What do you believe is the loss potential?

- Lost time injury

Event Description

At 0350 hours, Engine [number deleted] responded to a "boat on fire" in the apartment complex. Our company consisted of an engineer/operator, two firefighters and myself. Upon arrival, we found a boat engulfed in flames in the rear of the apartment complex on its trailer, still attached to a Ford Explorer. Already donned in full protective gear, we pulled our "trash line", 100' of 1 3/4", and proceeded to extinguish the fire which took about 3-5 minutes. Immediately after extinguishment, I called for an arson investigator to come out and take photos and investigate the fire. We took off our airpicks, masks, and coats after the fire to await the arrival of arson. There was some smoldering -vs. - steam coming from the rear of the boat, but we paid no special attention to it since other parts of the boat had some steam from the freshly extinguished fire. About 30 minutes after we put the fire out, I started talking to area residents, and they stated that neither the boat nor the car had been moved since February 2007, and that the vehicle had "out of state" plates. I walked past and around the boat, and there was still some smoldering. About 45 minutes after extinguishment, the arson investigator arrived. I had my two firefighters put some water on the boat to "prevent rekindling" due to the smoldering. My firefighters had their bunker pants with boots and gloves and proceeded to wet down the interior rear of the boat. They sprayed it for about 15 seconds, then turned the nozzle off. One of the firefighters attempted to peer inside to see why it was still smoldering after they placed water on it and then, WHOOOOOSH! THE GAS TANK EXPLODED! I was behind the engine and ran around to see the rear of the boat fully engulfed in flames. Since I had my gear outside of the pumper, I quickly put my coat and gloves back on and took the nozzle and had my two firefighters get back into their coats and helmets. Since the gas tank ruptured, we could no longer extinguish it with water, so we used our foam applications of 3% to extinguish the flames and suppress the vapors. After about two minutes of foam, the incident was back under control. We cleaned our foam eductor, and flushed the line, picked up our equipment and returned to service with a whole new respect for vehicle fires.

Lessons Learned

What lessons were learned? Never underestimate salvage and overhaul since this is where a large number of post fire injuries occur. What actions can correct the situation? When doing a post analysis of any incident, we need to have at minimum, hand, head and eye protection (helmet and gloves).

Report Number: 07-0000768
Report Date: 03/05/2007 1133

Synopsis

FF cuts hand when breaking window without gloves.

Demographics

Department type: Combination, Mostly paid
Job or rank: Fire Fighter
Department shift: 10 hour days, 14 hour nights (2-2-4)
Age: 25 - 33
Years of fire service experience: 7 - 10

Region: FEMA Region III
Service Area: Rural

Event Information

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.
Event date and time: 03/04/2007 1830
Hours into the shift: 0 - 4
Event participation: Involved in the event
Weather at time of event: Clear and Dry
Do you think this will happen again? Yes
What do you believe caused the event?

- Human Error
- Decision Making
- Individual Action
- Equipment

What do you believe is the loss potential?

- Minor injury

Event Description

We arrived at the scene of a reported commercial building fire to find a small fire visible through the glass of an overhead door. Command was established by the officer in charge. One firefighter dismantled the engine and broke a large pane of glass to gain entry and quickly knock down the fire. Another firefighter deployed a 1 3/4" pre-connected handline and handed it to the firefighter who gained entry through the window of the overhead door. The fire was quickly extinguished and little overhaul was needed. The firefighter who broke the glass and made the attack felt pain in a finger on his hand and discovered that he had been cut. He was wearing all required PPE, including SCBA, however failed to don gloves prior to breaking the glass. He suffered a laceration on his hand and required stitches. Failure to wear gloves contributed to the injury and is a violation of the department's safety policies.

Lessons Learned

Issued safety equipment and gear should be worn in all situations that require it. Stop, think, and use good judgment before taking any action(s) that could injure you or members of your crew.

Report Number: 08-0000090

Report Date: 02/16/2008 0141

Synopsis

FF becomes entangled in wires.

Demographics

Department type: Combination, Mostly paid

Job or rank: Safety Officer

Department shift: 24 hours on - 48 hours off

Age: 43 - 51

Years of fire service experience: 30+

Region: FEMA Region III

Service Area: Suburban

Event Information

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

Event date and time: 01/04/2008 0730

Hours into the shift:

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

Weather at time of event: Clear with Frozen Surfaces

Do you think this will happen again?

What do you believe caused the event?

- Situational Awareness
- Individual Action
- Procedure
- Decision Making
- Human Error

What do you believe is the loss potential?

- Minor injury
- Life threatening injury
- Lost time injury

Event Description

I responded as the incident safety officer for a house fire in a single family detached dwelling. Temperatures were hovering around 15 degrees and there was frozen snow on the ground. Our response assignment consists of 5 engines, 2 ladder trucks, 1 heavy rescue, 1 EMS unit, 2 battalion chiefs and 1 safety officer for a structure fire. There was a report of a person trapped in the house. The shift commander (an assistant chief) also responded. First arriving crews reported a working basement fire and advised everyone was out of the house and accounted for. After reporting to command, I took a lap around the house and observed a small, 1950's vintage, split level with a large 2 story addition attached by a breezeway style kitchen off the C Side. Fire was showing from the D Side basement window in the original structure. Due to the unusual addition and extensive smoke conditions, locating the exterior access to the basement was somewhat hampered. Command ordered me to check on the crews operating in the basement since there were some garbled radio transmissions and little progress on controlling the fire. The IC was considering an evacuation of the structure. Once I located the exterior basement entrance (on the C Side of the original house, but hidden by a large deck between the house and the addition) I donned my SCBA and made my way down the outside stairs. Once I entered, I crouched to stay below the smoke line, noting with my handlight that extensive damage had been done to the floor joists. Command called for an evacuation of the building just as I encountered the

basement division commander (a BC) about 15 feet inside the basement door. He was agitated and ordering his crews out of the structure. When I asked him what the problem was, he told me there was a significant entanglement hazard from drooping wires and we needed to get out of the building. We accounted for all personnel and exited the building. Once outside, he stated he was walking through the smoke and had become enmeshed in the low hanging wires, becoming momentarily trapped and disoriented. The wires had wrapped around his facepiece and helmet. He stated the more he tried to disentangle himself, the tighter the wires wrapped around his head and neck. He didn't have a pair of cutters and the entangling was forcing him to stand upright. He could feel heat building up around him but was trapped in an upright position. He began calling for help. Another firefighter arrived with a pair of cutters and cut him out of the hazard. The BC also stated another officer had also been caught in the wires, tearing the trim off the brim of his helmet, but had managed to disentangle himself without incident.

Lessons Learned

Stay low in smoke filled atmospheres. Carry a pair of lineman's pliers in your pocket. Organize the tools and equipment in your pockets so you can find everything by touch. Set up one coat pocket for firefighting (e.g., firefighting gloves, lineman's pliers, multi-screwdriver, door chock and latch straps) and the other pocket for extrication/overhaul (e.g., work gloves, safety glasses, hearing protection, seat belt cutter, etc.). Work in teams of at least 2 members. Carry a handlight with you at all times. If you get in trouble, sound a Mayday immediately. Speak clearly through your facepiece with your microphone pressed to the side of your facepiece, not on your regulator.