

National Fire Fighter Near-Miss Reporting System Reports Related to Ground Ladder Reports

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07-965

Event Description

Four engines (staffing level of three), one truck (staffing level of four), and battalion chief were dispatched to a residential fire (actually four apartment units in a converted residence). Enroute, dispatch advised that a person had jumped from the second floor and that there were additional persons reported trapped. The response was increased with an additional BC, engine, and two ALS medic units.

Initial operations involved attacking the fire on the second floor concurrent with ventilation, entering, and searching (VES) the unit on the second floor, side Charlie. Primary search found no victim and fire attack operations continued to gain control of the fire, which had extended to the attic. The truck (which had previously conducted VES) was tasked with vertical ventilation. They obtained a 35' ladder and proceeded to side Bravo, but were unable to deploy the ladder due to electrical lines. They relocated to side Delta, but were obstructed by a single story section of the house. They then gained access to the first floor roof (pitched) with a roof ladder and placed a second roof ladder on the steeply pitched roof of the main section of the house. The eave line was approximately 4.5 feet above the first floor roof. The first firefighter was able to climb from the first floor roof onto the roof ladder and was handed a chain saw. The second firefighter slipped while attempting to access the roof and was caught by the remaining member of the truck crew on the first floor roof.

An additional ladder was subsequently placed to provide access from the first floor roof to the second floor roof.

Lessons Learned

Apparatus placement to permit use of the aerial would have eliminated the problem with access. The crew deliberately placed the truck to permit ease of access with ground ladders (due to small building size).

Taking the time to evaluate placement of ground ladders and making an effective risk assessment would have prevented members from taking the unnecessary risk resulting from their choice of ladders and placement.

This situation was in part a result of the stress caused by the report of persons trapped (the victim was located in the fire area during secondary search) and by the fatigue of the truck crew who had extended maximum effort in accessing the second floor unit and conducting search operations.

09-266

Event Description

While breaking down equipment at a structure fire, I was assisting in lowering an extension ladder that was thrown to a 2nd floor window. I was wearing a helmet,

National Fire Fighter Near-Miss Reporting System Grouped Reports: Ground Ladders gloves, bunker pants and boots at the time. I was positioned under the ladder to lift the ladder from the window sill. When lifting the ladder from the window the tip caught on some debris. I believe it caught on the screen or something and debris, glass, wood, and the screen rained down on me. I told my partner to watch out and I stood still. I felt debris hitting my helmet. I quickly checked my neck and shoulder area to see if I had suffered an injury. Not feeling any pain or injuries, I continued to lower the ladder and place it back on the apparatus.

Lessons Learned

I learned to approach the ladder in order to view the entire window before lifting the ladder out of the window and to wear full PPE at all times when operating in the hot zone of a structure fire. Do not take for granted that the whole window was cleared of debris. Reinforce training and use of SOG's for throwing ground ladders, clearing the whole window of debris to facilitate ventilation, and improving firefighter safety.

10-344

Event Description

I was assigned as a lieutenant on a truck company when we were dispatched to a chimney fire in a story and a half residence. After we established vertical ventilation towards the Alpha Delta corner of the residence, we were then assigned to the Charlie side of the structure to remove a metal cap from the top of a chimney. This was needed to allow for the engine company to apply foam to the interior of the brick veneer chimney. My crew and I utilized portable ground ladders to access the metal cap. Our 28 foot ladder was laddered to the face of the chimney and my outside vent man was positioned at the top of the ladder to attempt to remove the metal cap. I was positioned at the base, footing the ladder for him. Interior crews were applying foam to the interior of the chimney when I noticed a large amount of foam pushing out through a mortar joint in the chimney. One of my firefighters noticed the portion of the chimney that the ladder was on was leaning in towards the house. I told my outside vent man to descend the ladder immediately. Upon further investigation, we found that the interior of the chimney had been greatly compromised by fire. It is my belief that if my outside vent man would have been on that ladder any longer, the chimney would have failed and a catastrophic event would have happened.

Lessons Learned

The fact that the structural components of the chimney were compromised could have been communicated to us. A risk assessment should have been done to analyze whether the task is absolutely worth putting firefighters in harms way. The task being performed was not a mission-essential task.

09-134

Event Description

Training was being conducted on ladders. It was a windy day and the 24-foot ladder was left up in the extended position against the training tower. The instructor called the

National Fire Fighter Near-Miss Reporting System Grouped Reports: Ground Ladders cadets together to talk to them. The wind blew the ladder down. As it was falling some of the cadets noticed and gave warning. In the nick of time a few cadets caught it as it was about to hit another cadet who was looking in another direction and did not have his helmet on.

Lessons Learned

While on the fire ground our SOGs state to wear the minimum of helmets and gloves at all times. All cadets know the SOG but some choose not to follow it if they are not "actually" involved in a training exercise. Instructors must enforce SOGs at all times and with all students.

09-355

Event Description

While training new firefighters in the raising and extension of a 35'- 3-section ladder, there was a series of events that cause the ladder to fall causing minor injuries to two students.

During the raising, student "A" was hoisting the halyard when he pulled the halyard on more of an angle than straight down. At the same time, student "B", who was bracing the ladder, was not prepared for the tortional force created by this angular pulling. The ladder was extended approximately 30' so the slight imbalance at the base was multiplied at the tip and the center of gravity quickly shifted to a point where the ladder began to tip towards the building.

Students "B" and "C" were footing the ladder and were not able to control the fall. I as the instructor, attempted to assist them in a controlled fall of the ladder with minimal success. This was further complicated by the fact that student "A" let go of the halyard causing the ladder to retract in addition to falling. This caused the ladder to miss the overhang of the building that we were trying to reach and fall completely to the ground. During the collapse, student "B" and student "C" each received minor injuries that did not require transport.

Lessons Learned

This reaffirmed my knowledge that larger ground ladders take a lot of training, practice, and situational awareness to safely raise. While many training manuals suggest that only 2 or 3 firefighters are needed for this evolution, it is most safely accomplished with 5. That would be 4 to form a stable base and one to extend the ladder.

10-424

Event Description

Brackets [] denote reviewer de-identification.

While conducting firefighter safety and survival training, this near-miss occurred. A ground ladder was placed to a second story window at a 60 degree angle to practice

National Fire Fighter Near-Miss Reporting System Grouped Reports: Ground Ladders ladder bailouts. Following several successful evolutions, our guard was let down. Upon doing the [name deleted] procedure, the firefighter was looking at the second floor instructors and discussing his progress when the ladder slid on the concrete and the firefighter began to fall to the ground. The firefighter reached for the window and was grabbed by two instructors and pulled into the second floor window without further events.

Lessons Learned

Ensure ladders are secured to the training building with a tag line and make sure the ladder is properly heeled. Ensure the belay/safety line is appropriately managed and don't become complacent following several successful evolutions.