



National Fire Fighter Near-Miss Reporting System Head Burn Injury-Related Reports

Report #	Synopsis	Page #
05-666	Flashover traps firefighters on 2nd floor. Forces bail-out.	2
09-267	Assist your partner to assure proper PPE use.	2
07-960	FF's injured during training evolution.	3
08-377	Delayed water plus explosion equal near disaster.	5
07-1178	Mayday in Division 3	7
07-735	Flashover fire in mobile home.	8
09-101	PPE protects FF when gas tank flashes.	9
07-959	Training event and fire behavior	9
07-960	FF's injured during training evolution.	10
08-273	PPE saves firefighter from serious injury.	11
05-388	Instructor suffers burn during training exercise while using defective helmet.	12

Report Number: 05-0000666

Report Date: 12/22/2005

Event Description

On February 9th 2003, I was involved in a flashover that took seconds to erupt. While driving the ladder truck to a reported structure fire, a confirmed working fire w/possible entrapment report came from the first arriving chief. I radioed command to see if we were going to stick the building. The chief requested forcible entry first since the 9-1-1 call originated from within the structure. I donned my PPE and met the assistant chief at the Exposure A" entry door, already opened by the police department. This was the given address only to be the Exposure "D" Side. Together with the rest of the truck crew, 2 firefighters, we searched the first floor. Found heavy fire in a bedroom, B-C Corner, with extension to a center room "C" Side where the second floor stairwell was located. No victims were found on the first floor. Soon after, I brought the firefighter with the nozzle, a charged line, to the center room with the stairwell. Since he was alone, the ladder crew backed the line up and the assistant chief and I proceeded to the second floor, myself going first. The confirmed entrapment was on the second floor. **When I got to the top of the stairs with my left hand on the wall, I inadvertently walked into the pitch of the roof that occupied most of the hallway. It knocked my helmet, mask & hood off. I calmly removed my gloves, replaced my PPE and before I could reach my gloves, I had placed between my feet,** is when my partner reported the fire rolling over our heads. **Within seconds it flashed, consuming us in fire from ceiling to floor.** We backed away, but with all the rooms being locked we had no place to escape. I then told my partner I was going to try the windows that were at the top of the stairwell on the "D" Side. At first I tried using my elbow to break the window and then my helmet. It didn't break! Found out later on they were made of plexi-glass. I then retreated back to where my partner was and told him we were going to die here. With one last effort, I told my partner I was jumping out the window. I remember thinking that the weight of my airpack and strength of my helmet, I could break the glass. I don't remember hitting the window, only seeing the outside of the structure and dangling from the window sill. I could hear people, spectators, screaming and the voice of a firefighter below me telling me to, "Let go. I'll catch you". After hearing him the second time I let go! He caught me and together with two police officers, they dragged me away from the structure. The whole time I kept telling him my partner was right behind me. Finally, about 30 seconds later my partner found his way to the open window, but wouldn't jump. **Within seconds, a portable ladder was raised to him, where he descended head first. We were both transported to the trauma center, evaluated and later airlifted to the burn center. My partner spent eight days there and I spent a month. Two weeks were spent in the Burn ICU, and two weeks in the Step-Down Unit.** It is almost 3 years later and I'm still having surgery to my hands.

Report Number: 09-0000267

Report Date: 03/12/2009

Event Description

Our department received a call for a residential structure fire, fire reported in the basement. While enroute, the responding units received information from dispatch indicating the resident was attempting to extinguish the fire and refused to leave the structure. Upon arrival, the chief of the department assumed command on Side A. He gave an initial report of a 2-story residential structure with smoke showing from Side C. A 360 of the structure revealed the resident outside on Side C and a moderate amount of black smoke coming from a basement doorway near the B-C corner. Fire was observed inside the doorway and to the right. Call was then upgraded to a second alarm. A 200' 1.75" pre-connected attack line was deployed by a three-member team from the initial attack engine and stretched to Side C. The crew proceeded inside and knocked the fire down, which was located inside a storage room. The area was overhauled and no extension was found. When the initial attack crew exited the structure and prepared to head off to the rehab area, I noticed one of the members' protective hood was pulled up, exposing an area, approximately the size of a tennis ball, on the rear of his neck. The portion of the hood that had pulled up appeared to have been caught in the liner of the member's helmet. It became dislodged when he pulled the hood over his head after donning his face piece or after adjusting his helmet just prior to entry.

Needless to say, this member was very fortunate that the fire, which turned out to be rather small, had not built up to the point of causing a severe burn to his neck during fire suppression operations. Although this was one individual that would have been directly impacted by a burn, all members of a suppression crew must look out for each other by making sure everyone is buttoned up in the hard-to-see areas prior to entry.

Report Number: 07-0000960

Report Date: 06/14/2007

Event Description

Training began at approximately 0720 hours with a briefing conducted at the station in which all members participating were given an orientation in the classroom of the schedule, assignments and objectives for the training session. A diagram was produced on the dry erase board of the incident area sketch. Eight companies were assigned with inside safety crews and 3 stokers were used for prop setting and fire growth monitoring. All stokers were given instructions not to deviate from fuel load sets. Evacuation signal and PAR procedures were reviewed along with floor plan, MAYDAY radio call, all training objectives and safety line placement was discussed. At the training site, the lead instructor and inside safety crews completed a walk through of the site reviewing fire set locations and ventilation cutaways. All NFPA 1403 compliant devices were reviewed and identified (egress points, vent holes, etc.). All lines were laid out, PPE was checked, and roll call of all companies was taken prior to the first evolution. Three burns had taken place prior to the incident burn. Burn 4 began with the fire on the front porch in Division A. Fire was ignited by stokers and allowed to begin free burning. Fire set was 4 wood pallets, straw and a combustible finish of wood paneling was present to

approximately 3' level around the inside of the room. During free burn, the windows on Division A/B began to fail. The inside safety crew (Firefighters A & B) along with three stokers were located on the first floor of the fire building. Firefighter A & B proceeded to the 2nd floor to assume a safety position and assist in watching crews working on 2nd floor. The attack team mounted the attack approximately 8 minutes after fire ignition and had trouble with a kinked line, which slowed the attack. The stoker line was charged and positioned into the fire floor through Division C. The line was not staffed by firefighter A, firefighter B or any of the stokers. Conditions deteriorated rapidly both visibly and with heat build up. Fire began to lap out of windows on Division A extending to the soffits of the house. At approximately 1056, a radio report was heard that firefighters A & B were in trouble and a ladder was requested to the 2nd floor at Division D. At this time, 4 safety personnel, 3 stokers and a 4 person attack team were in the structure. A stand by RIT took Division A's back-up line and knocked the fire down on the main floor while other outside crews placed a second 16' ladder to the window where firefighter B was signaling for help. Dense black smoke was igniting and surrounded him. The ladder did not reach the sill of the window and instead was hooked with the ladders hooks to the sill creating an almost vertical placement. Firefighter B was able to bail out. Firefighter A came to the window with extreme deteriorating conditions of fire and superheated smoke over his head. Firefighter A escaped the 2nd floor in similar fashion as Firefighter B. During Firefighter A's escape, he lost contact with the ladder and fell to the ground striking a rescuer who broke Firefighter A's fall and both landed on the ground. A PAR check was initiated of all crews and all personnel were accounted for. Firefighter B suffered minor injuries from the bail. Firefighter A received burns over an undetermined percentage of his body. His burns included ears, neck, cheek, hand area and steam burns to his back and arms. Firefighter A refused treatment at the scene by paramedics but was later transported by his Fire Chief to a local emergency room for evaluation. Upon evaluation of the burns to Firefighter A, was transferred to a burn unit in a nearby major city. The firefighter who was attempting to rescue Firefighter A when he fell, suffered a minor neck injury and back pain that cause one day of lost time. Firefighter A remained in the burn unit for approximately 5 days and was off work for several weeks.

Lesson Learned

An independent investigation was launched into this incident as directed by the hosting department Chief. Investigators were used from nearby training academy and all had experience investigating training injury incidents. The independent investigation made the following recommendations. 1. All participants must wear NFPA approved structure firefighter gear. The firefighter who received burns used an older rubberized set of gear and from burns and self admission, did not use a flash hood or the hood provided on the helmet. 2. All combustible interior wall finishing must be removed. One combustible panel was left in place and possibly increased fuel load. 3. Assure all paths of egress are maintained and protected. If training is taking place on upper floors, assure that proper size ladders are in place on all sides where egress may become necessary. 4. Ignition and interior safety teams should be limited to two personnel. Keeping safety teams interior from incipient stage through extinguishment should be carefully considered for each evolution. Every interior safety team shall have the protection of a hose line capable of delivering a minimum of 95 GPM. 5. Prior to the start of

each evolution, recheck all components of the drill using a safety officer checklist. This includes but is not limited to radio checks, water supply, fire streams and hose lines match the required fire flow for the evolution. 6. Constantly monitor weather conditions and if necessary suspend the training until favorable weather conditions exist. This includes changing wind conditions. During this training evolution, the wind increased significantly during the 4th (incident) burn. 7. Follow all components of NFPA 1403 when conducting live fire training. Continue to utilize the standards in the development of live fire training in the form of checklists and templates. Have a minimum of three separate people go through the checklist to make sure something was not missed and that all three agree that the 1403 topics have all been addressed. 8. Require all participants to sign an agreement that they will not refuse medical treatment and transport to the hospital if they are injured or possibly injured or directed by the host department and/or chief officer on the scene. 9. PPE must be NFPA approved and 3/4 boots and rubberized coats are not permitted. PPE must be worn in accordance with its designed use and inspected prior to each evolution by a safety person. This includes instructors, safety, stokers, and participants. 10. Guests participating in the training must have a signed permission slip from their Fire Chief granting permission to participate in the training. 11. Maintain a minimum of five hose lines; attack, back-up for attack, stoker line, safety line and an outside 2 1/2" line. 12. Designate radio frequencies and assign a designated person whose job is to do nothing but monitor working frequencies in a quiet, secluded location where MAYDAY and emergency traffic can be immediately recognized. 13. Consider creating safe haven rooms where crews can go for protection in critical unplanned situations.

Report Number: 08-0000377

Report Date: 08/13/2008

Event Description

All bracketed areas [] denote reviewer de-identification. Engine [1] along with Engine [2], Ladder [1], Medic [1] and mutual aid from two other departments were dispatched at 22:10 for a structure fire. While responding, dispatch advised that police officers were on scene and reporting visible flames. There was also a possibility of an unaccounted for occupant on the second floor. Engine [1] was the first unit to arrive and had smoke visible from the roof line and a "glow" coming from what appeared to be the roof on side C. Engine [1] located a hydrant near where they had parked and the driver/operator hand stretched a supply line to the hydrant and established water supply. The Engine [1] officer met with the residents outside and they relayed that all occupants were out of the structure and they believed the fire was on the second floor. The Engine [1] officer and firefighter then stretched a dry 200' 1.75" hand line into the building. Upon entering the building through the main entrance side A, crews encountered no signs of fire or smoke in the division 1 apartment. The crew then proceeded up the stairs to division 2 apartment. They found no smoke or fire. From the division 2 kitchen window side C, the Engine [1] officer could see the glow from what appeared to be a self venting fire on division 3 side C. With no smoke or fire on the second floor, the Engine [1] crew proceeded back to the stairs with the intent of going to division 3. On the second floor landing there was a metal door which was locked and this blocked access to the division 3 apartment. Engine [1] crew used a halligan bar and axe to pry open the door and then proceeded up the

stairs. As the crew approached the division 3 landing, light smoke was visible. This was the first smoke that was encountered on the interior of the structure. The crew donned their SCBA masks before proceeding up into the division 3 apartment. At the top of the division 3 stairs there was a drop down attic access ladder. Assuming that this was an attic fire, the Engine [1] officer opened the hatch and shined his flashlight into the attic. The officer found no smoke or fire in the attic. Knowing that the fire was presenting itself somewhere along side C, the Engine [1] officer and firefighter proceeded through the apartment towards the C/B corner. At this time, the Engine [1] crew still had light smoke and no heat present. Just beyond the bathroom, crews found a small room in the B/C corner of the apartment. This room was an access door to the knee wall access space. The Engine [1] officer believed the fire was somewhere in the side C attic area and could hear crackling sounds in the walls. The Engine [1] officer then opened the knee wall access looking for signs of fire. Immediately upon opening the knee wall access door, heavy smoke billowed out of the knee wall space. The door was placed back over the opening to contain the smoke and fire until the hand line could be placed into position. The Engine [1] officer radioed command and advised they had located the fire. At this time, the Engine [1] firefighter advised that he was out of hose and could not reach the fires location. The crew radioed for more hose to be brought inside to extend the attack line. The crew of Engine [2] arrived with the extra section of hose and proceeded to extend the hose line. It was at this time, the Engine [1] officer's low air bell began to alarm and he exited the structure to retrieve a full SCBA cylinder. Soon after the Engine [1] officer exited to replenish his SCBA, the Engine [1] firefighter also exited the structure due to low air. Both the Engine [1] officer and firefighter returned to division 3 minutes later with full SCBA. With the hose line extension completed, the hose line was re-charged and crews proceeded to extend the hand line to the B/C corner. Conditions on division 3 started to rapidly change and smoke was becoming darker and thicker. For the first time, crews stated they felt some heat but it was still very tenable. The Engine [1] officer (knowing the location of the knee wall access) proceeded back to this area followed by the Engine [2] officer. The hand line was also stretched in behind them by the crew of Engine [2]. Upon entering the room on the B/C corner of division 3, an explosion occurred. This was before ventilation or fire attack could be initiated. There was a loud bang and the entire division 3 area turned bright orange from floor to ceiling. This was later described as a wave of heat and smoke and the event pushed all the firefighters to the floor and knocked off the Engine [2] officer's helmet. Command seeing the heavy smoke and fire suddenly erupt from division 3, immediately sounded the evacuation order both via radio and apparatus air horns. The Engine [2] nozzle firefighter could see a silhouette of the two firefighters in front of him (Engine [1] and Engine [2] officer) and he opened the nozzle above and around them for several seconds. The glow subsided but there was still heavy smoke with almost zero visibility. The Engine [2] firefighter threw the nozzle forward to the firefighters in front of him so that they could use the hose line as an escape route. Simultaneously, the other firefighters were scrambling down the stairs and conducting their own personnel accountability report (PAR). After all firefighters were accounted for, they exited the structure.

Two firefighters indicated that their helmets were knocked off during the explosion, neither firefighter had secured their helmet's chin strap under their SCBA mask and the helmet was

therefore just balancing on their head. Had the subsequent fire ball been more intense or sustained longer these firefighters could have suffered burns to their head.

Report Number: 07-0001178

Report Date: 12/25/2007

Event Description

The weather was cold, clear, and sunny with heavy winds. At approximately 0850 hours, I was dispatched mutual aid to [County location withheld] for a building fire. En route to the incident there were a number of transmissions from the communications center indicating a working fire. [Engine A] arrived on scene to find smoke showing and reported a working fire. [County Battalion Chief] arrived very quickly after [Engine A] and established Command. Once I arrived on the scene, approximately (2-3 minutes after [County Battalion Chief]) I was assigned as the "Division 3 Supervisor". Units assigned to Division 3 included [Engine A], [Engine B], [Engine C] and [Tower C]. I later learned that I also had a truck company from [the county] assigned to me as well. The original fire building was a 3 story (4 in the rear) garden apartment building with a common attic to 2 other buildings (3 total in the row). There were four apartments per floor and both a front and rear stair well. Upon entering the structure via the main entrance on side "A", smoke conditions were moderate, visibility was fair to poor, and the heat was minimal to non-existent. As I arrived on the 3rd floor, visibility and smoke conditions were only a bit worse. I found crews opening the scuttle access to the attic at the top of the main stair well. There was in fact visible fire in the attic but it was minimal at this time. I entered apartment 303 and found crews working to extinguish fire in the rear bedroom (quadrant c). Visibility in the apartment was poor, smoke was moderate to heavy, and the heat was minimal. All crews were now working in apartment 303 hooking ceilings and using two hand lines in an attempt to extinguish the fire in the attic above as they hooked. It did not seem as though we were making much progress at all. I gave Command a report and advised we could use a third hand line on the third floor. Shortly there after we confirmed the entire attic above us was in fact involved in fire. What seemed to be several minutes later, a portion of the ceiling along with debris from the attic dropped into the kitchen area and created what I will refer to as a "wall of fire." What seemed to be immediately after the ceiling and debris fell, a member of [Tower C]'s crew reported to me that he believed two firefighters to be on the other side of that wall of fire with no hand line. I directed him and his partner to go get the two firefighters and assist them to safety. At this point, I heard someone scream, "I'm burning up!" (his voice was clear and did not sound as though it was coming through an SCBA face piece). I immediately transmitted a "May Day" and reported two firefighters trapped and burned to Command and requested the assistance of the Rapid Intervention Group (RIG). As soon as I completed transmitting the "May Day" report, a crew of two from [Tower C] was already removing the two injured firefighters from the apartment and the building. I later learned the two injured firefighters were from [Engine A] and [Engine D]. One of the injured lost his helmet and received burns to the top of his head and the second injured firefighter had his face piece knocked off either by falling debris or a hose line. Both were transported to [hospital name withheld], one was kept over night for observation. At this point, visibility was zero and Command was ordering the building

to be evacuated. The scene was a bit chaotic for a few minutes. Once I felt comfortable that all crews had in fact evacuated from the third floor, I found my way out and evacuated as well. Command performed a PAR and all units and personnel were accounted for. Once the Par was complete, Command reformed attack groups and sent crews back inside to fight the fire. I was again assigned as the "Division 3 Supervisor." After several minutes of fighting fire on the third floor, it seemed as though we were being over run by the fire. I notified Command that we were making no progress on the third floor. Command again evacuated the structure. At this point, the incident transitioned to an exterior/defensive attack. Several ladder pipes were placed in to service and flowed for several minutes. Once it appeared that the bulk of the fire was knocked, Command assigned [County Tower A] and me to recon the original fire building. We found the third floor to be significantly compromised and not safe to occupy. On the second floor, we found fire in the rear stair well (b / c quadrant). We extinguished the fire and reported to Command what we had found. Command once again ordered us out of the building. Command next assigned me as the "Division 2 Supervisor" with [Engine B] and [County Tower B]. Our mission was to complete a thorough search of the second floor, open up, and extinguish any hot spots we found. I notified command once our mission was complete and we were once again ordered from the building. At this point, I reported to the Command Post and was placed in service a short time later. [Reviewer editing occurred where square brackets are present.]

Report Number: 07-0000735

Report Date: 02/19/2007

Event Description

We were dispatched to a **reported mobile home fire**. We arrived on-scene 7 minutes after dispatch. We found the rear and middle of the trailer fully involved. We were advised by PD that there was a good possibility of occupants in the structure. There was a vehicle in the driveway and footsteps in the snow going to the front door. The crew was masking up on the front porch and preparing to enter to conduct a search. The crew had one 1 3/4" line. Two firefighters along with the truck captain were masked up. The chief arrived on-scene, conducted a 360 degree walk around, and established command. Two firefighters entered the front door and began suppression efforts with water flowing. Command had arrived on-scene just prior to crew entering. Command ordered crews out of the structure. **No sooner had command ordered the crews out, a flashover occurred to the front room of the trailer where the two firefighters had entered.** The captain was at the door and yelled for the firefighters to exit. One firefighter exited quickly, fell down the steps, and was assisted by the captain. The second firefighter exited but was standing at the doorway somewhat disoriented. The Incident Commander (IC) had exited his vehicle and ran to the doorway. As the second firefighter exited, he had visible fire to his arms. The IC grabbed the handline, extinguished the firefighter, and pulled him off the porch onto the ground. The IC then radioed for a paramedic unit. Upon assessing the firefighters one had no injuries or any noticeable damage to his gear. **The second firefighter had a small second degree burn to both ears. He also had hair singed on the rear of his head at the base of his hairline. Both firefighters were wearing full PPE.** The second firefighter had noticeable charring to the arms of his coat and discoloration to the entire rear of the coat. The helmet was soot covered and the shields were melted. His hood had discoloration

and some charring in four places; two spots near each ear. The SCBA was soot covered but had no apparent damage and tested fine. With the information given by the police along with visual indicators, it did appear that the trailer was occupied. As it turned out, the occupant and her child had moved out of the trailer a week prior due to frozen pipes and were staying at another location. The crew members followed policy upon entering to conduct a rapid search. Command had noticed a change in the smoke color and ordered the crew out. Total time in the structure for the crew was less than a minute. Both crew members self extricated themselves. The second firefighter stated that he had seen the room go completely red with fire and grabbed the first firefighter to pull him out. The first firefighter stated he did not realize the room had flashed over and his vision was completely obstructed by the heavy black smoke and soot. The captain along with the IC and engine operator all assisted with extinguishing and rendering aid to the two other members. The first firefighter was checked by paramedics and released. He assisted with the remainder of the suppression.

Report Number: 09-0000101

Report Date: 02/03/2009

Event Description

We were a three-person Quint company. We received the call as a vehicle fire. Upon our arrival found a 1973 Ford F1000 gasoline-fueled logging truck fully involved in the cab area. We immediately laid 1-3/4" attack line with a department-fabricated piercing nozzle. We extinguished the majority of the fire within a few minutes. There was one 'hot spot' inside the cab located on the passenger-side floorboard. I took a 2.5 water extinguisher filled with fuel emulsifier and sprayed the contents of the extinguisher into the passenger-side side-saddle fuel tank, which was approximately 40-50 gallons in size. Unbeknownst to my crew or me, the truck's driver had just refueled the truck to practically full capacity. Spraying [fuel emulsifier] in a fuel tank was a standard practice at my department during training exercises involving vehicles to eliminate any supposed risk with the fuel tank. When I inserted the extinguisher nozzle in the tank's opening and sprayed it, I was completely doused with gasoline from head-to-toe. Instantly, the gasoline ignited and I was now fully involved with fire. I was wearing my complete bunker gear, helmet, gloves, and hood with SCBA in place. I was on fire for at least 30-45 seconds. The fire was eventually extinguished by my crew. I suffered a small burn to my right cheek where my hood and face piece had apparently separated. The SCBA straps and face piece were severely damaged and my bunker gear was damaged beyond repair. I was transported to the closest emergency room for evaluation and treatment.

Report Number: 07-0000959

Report Date: 06/14/2007

Event Description

This event occurred at the end of a controlled training burn. A crew member wanted to complete an item from his training task book and requested to make a window cut with the chain saw. He was granted permission from command and instructed to cut on the "Charlie" side of the structure. At the time of this occurrence, the structure burn had been in progress

several hours and the fire attack was changed from interior to exterior only. One crew member approached the window to remove the casement. This crew member was in PPE except with no hood. He was forced to back away from the structure because of the radiant heat. Knowing this, a second crew member approached the structure in full PPE to make a window cut. At that time, the crew member knew the room was fully involved with fire but he proceeded anyway. The crew member started to make his cut but the chainsaw quit running about one inch into the cut. The crew member stated he was then immediately forced to back away from the structure because he could feel the heat on his left arm. After backing away from the structure, the crew member discovered that the reflective striping had melted and parts of the sleeve had turned dark in color. The face shield of the crew member had sustained glazing damage over approximately 1/3 of the shield. The crew member's hood had also sustained burn damage. After further inspection, it was determined by the Training Chief that the turnout coat was ruined and would not be serviceable. This event was witnessed by others on the scene and no one attempted to stop this unsafe act.

Even though this occurred at a training burn, the principals of fire behavior do not change. It is foolish to approach any portion of a structure that is ventilated and free burning (post flashover conditions). The crew involved in this should receive additional training about fire dynamics and fire behavior. The company officer should have known that it was unsafe to approach the structure under the existing conditions. Even wearing full PPE will not protect personnel from the extreme radiant heat from a free burning fire. This event could have resulted in a severe burn injury to the involved crew member.

Report Number: 07-0000960

Report Date: 06/14/2007

Event Description

Training began at approximately 0720 hours with a briefing conducted at the station in which all members participating were given an orientation in the classroom of the schedule, assignments and objectives for the training session. A diagram was produced on the dry erase board of the incident area sketch. Eight companies were assigned with inside safety crews and 3 stokers were used for prop setting and fire growth monitoring. All stokers were given instructions not to deviate from fuel load sets. Evacuation signal and PAR procedures were reviewed along with floor plan, MAYDAY radio call, all training objectives and safety line placement was discussed. At the training site, the lead instructor and inside safety crews completed a walk through of the site reviewing fire set locations and ventilation cutaways. All NFPA 1403 compliant devices were reviewed and identified (egress points, vent holes, etc.). All lines were laid out, PPE was checked, and roll call of all companies was taken prior to the first evolution. Three burns had taken place prior to the incident burn. Burn 4 began with the fire on the front porch in Division A. Fire was ignited by stokers and allowed to begin free burning. Fire set was 4 wood pallets, straw and a combustible finish of wood paneling was present to approximately 3' level around the inside of the room. During free burn, the windows on Division A/B began to fail. The inside safety crew (Firefighters A & B) along with three stokers were located on the first floor of the fire building. Firefighter A & B proceeded to the 2nd floor to

assume a safety position and assist in watching crews working on 2nd floor. The attack team mounted the attack approximately 8 minutes after fire ignition and had trouble with a kinked line, which slowed the attack. The stoker line was charged and positioned into the fire floor through Division C. The line was not staffed by firefighter A, firefighter B or any of the stokers. **Conditions deteriorated rapidly both visibly and with heat build up.** Fire began to lap out of windows on Division A extending to the soffits of the house. At approximately 1056, a radio report was heard that firefighters A & B were in trouble and a ladder was requested to the 2nd floor at Division D. At this time, 4 safety personnel, 3 stokers and a 4 person attack team were in the structure. A stand by RIT took Division A's back-up line and knocked the fire down on the main floor while other outside crews placed a second 16' ladder to the window where firefighter B was signaling for help. Dense black smoke was igniting and surrounded him. The ladder did not reach the sill of the window and instead was hooked with the ladders hooks to the sill creating an almost vertical placement. Firefighter B was able to bail out. **Firefighter A came to the window with extreme deteriorating conditions of fire and superheated smoke over his head.** Firefighter A escaped the 2nd floor in similar fashion as Firefighter B. During Firefighter A's escape, he lost contact with the ladder and fell to the ground striking a rescuer who broke **Firefighter A's fall and both landed on the ground.** A PAR check was initiated of all crews and all personnel were accounted for. Firefighter B suffered minor injuries from the bail. **Firefighter A received burns over an undetermined percentage of his body. His burns included ears, neck, cheek, hand area and steam burns to his back and arms.** Firefighter A refused treatment at the scene by paramedics but was later transported by his Fire Chief to a local emergency room for evaluation. Upon evaluation of the burns to Firefighter A, was transferred to a burn unit in a **nearby major city.** The firefighter who was attempting to rescue Firefighter A when he fell, suffered a minor neck injury and back pain that cause one day of lost time. Firefighter A remained in the burn unit for approximately 5 days and was off work for several weeks. **The firefighter who received burns used an older rubberized set of gear and from burns and self admission, did not use a flash hood or the hood provided on the helmet.**

Report Number: 08-0000273

Report Date: 05/23/2008

Event Description

Firefighters responded to **a working fire in a one story wood frame bungalow.** Initial reports indicated a well involved fire in the rear of the structure. An attack team partially forced the front door open (approximately 45 degrees-Note: this is a key event) and entered with a charged 1 ¼" hose line. **A second line was in the process of being positioned when the nozzleman stopped to don his SCBA facepiece and protective hood.** The firefighter was standing approximately five (5) feet to the side of the front door. At the point where the firefighter had completed pulling the nomex hood into place and putting the helmet back on, **a fire ball erupted from the front door enveloping and pushing the firefighter backward.** The door being opened approximately 45 degrees directed the flame to where the firefighter was standing. **Because of his protective equipment, the firefighter was not injured** and returned to the hose line to begin entry with other firefighters as a back up hose line crew. The interior crew had pushed far enough into the structure that they were unaware of this event.

Event Description

Instructor's scalp above ear scalded by steam while in live-fire burn room, with attack team fighting simulated contents fire. Fire room uses propane fueled prop. The nomex flap on the instructor's helmet had detached from the helmet and was hanging down out of its intended position. Instructor was wearing a PBI hood. However, the steam penetrated that hood causing the instructor to halt the exercise and hastily exit the structure. The instructor was aware of the flap being detached before entering the structure, but had not reported the problem, stating that he didn't want to have his "experienced" helmet replaced with a shiny new one. His skin, although slightly reddened, returned to normal appearance within an hour and no treatment was required.

Lesson Learned

Pride or status is no excuse for injury. "Experienced," soiled, worn, broken-in, etc. equipment should not be glorified to the point that firefighters wear it as an advertisement of experience or status. Conversely, shiny, clean new gear shouldn't be viewed as a negative status. Policy should clearly be communicated to members that problems with gear shall be reported immediately and corrected or replaced. Reminders will be issued at training and in writing to report problems and not to "forge on" with defective gear. The call will be presented as an example of how injury can occur and why prompt resolution is important to personal safety and positive outcomes.