

Denver Fire Department



Post Incident Analysis

16-02

Multi-Family Residential Structure Fire

15MAR2016

1515 Grant Street

Post Incident Analysis Description

The main purpose of a Post Incident Analysis (PIA) is learning. When an incident occurs, regardless of type or outcome, a PIA may be initiated. Facts are gathered through dispatch transcripts, FD707 written reports, available video, and individual interviews. Every effort is made to ensure the analysis is accurate. The PIA committee, composed of members of the Denver Fire Department representing ranks from Firefighter to Assistant Chief, will review all information and begin building the PIA. The report will include background information, incident overview, a final analysis, and recommendations. The success of the PIA Team is dependent upon the cooperation of all members. The process will provide an enhanced method to disseminate critical lessons learned during an incident, thus allowing us to learn from actions taken and improve our current strategy and tactics.

Fraternally,

The Denver Fire Department PIA Committee

General Summary

- Report of a multi-family structure fire at 1515 Grant Street.
- Multiple calls, including occupant and construction worker across street.
- Chief 2 arrived on scene first with no smoke or fire showing.
- Truck 8 arrived on scene and positioned in front of the building facing south.
- Truck 8 given assignment to investigate and reported odor of burnt food at building entrance.
- Truck 8 chocked door open at entrance in courtyard.
- Light smoke started showing from the 3rd floor.
- Truck 8 masked up and made entry to fire apartment, experienced moderate smoke at chest level.
- Apartment door was chocked open.
- Victim reported on 3rd floor balcony with brown smoke issuing from apartment.
- Truck 8 C & D were performing a left hand search and experienced high heat and poor visibility.
- Truck 4 arrived on scene and positioned nose-to-nose with Truck 8.
- Truck 8 C & D found fire and darkened fire down with the light water.
- Window on north side fire escape is vented due to high heat and zero visibility.
- First due engine (E1) secured a water supply at Colfax & Grant.
- Second due engine (E3) secured a water supply at 16th & Grant.
- Both engine companies pulled 200' attack lines. E3 1 ¾", E1 2 ½".
- Both engine companies had to extend their attack lines. E1 added 100' to their 2 ½" attack line in the courtyard. E3 added 50' to their 1 ¾" attack line in the stairwell between floors 2 and 3.
- Engine 3 D was utilized to advance Engine 1's 2 ½" attack line.
- Truck 8 C & D make the 3rd floor balcony to assist victim.
- Rescue 1 D, Truck 8 B, and Truck 8 A meet at fire apartment entrance.
- Truck 4 deploys 28' ground ladder to rescue victim and Truck 8 C & D on 3rd floor balcony.
- Engine 6 connects to Engine 1's Humat valve and completes relay operation.
- Truck 4 A & C deploy Truck 4 aerial and must cut trees to reach the roof.
- Truck 4 D climbs ladder to assist victim and Truck 8.
- Fire starts venting from apartment onto 3rd floor balcony.
- E6 deploys 300' 1 ¾" from E3 to exterior on alpha side.
- Truck 8 C & D remain between fire and victim until victim is on ladder, taking an extraordinary amount of heat.
- Victim is assisted down ladder.
- Truck 8 C & D exit balcony via ladder with victim.
- Victim is transported by only ambulance crew on scene which was not replaced during the remaining IDLH portion of the incident.

General Summary

- Water is applied to fire by E3's 1 ¾", did not have enough hose to make the balcony.
- Truck 8 C & D return to fire apartment to locate other Truck 8 crew members due to inability to reach by radio.
- E6 applies water to balcony then climbs ladder to complete extinguishment.
- During fire attack Truck 4 was assigned roof operations. Aerial placement delayed due to need to cut trees and lack of visibility due to smoke conditions.
- Truck 4 cuts two holes, one above fire apartment and one above stairwell. Truck 4 requested that interior companies pull ceiling below vent holes.
- Command, after several attempts to contact Fire Attack Supervisor (T8A) and Engine 3 A, transitions Fire Attack Supervisor to Rescue 1 A.
- Chief 6 (not on scene) notified command that Fire Attack Supervisor was on the wrong channel and is trying to get him over to the correct channel.
- Truck 8 re-grouped and started post-control overhaul on 3rd floor.
- Truck 8 sent to rehab to replace SCBA bottles then re-assigned to roof after a short period.
- While debriefing, it was discovered that 3 members from Truck 8 sustained burn injuries ranging in severity.
- With no ambulance on scene, Truck 8 drove to DHMC to receive treatment in the emergency room.
- DHMC ER was not aware that they were receiving 3 firefighters with burns.

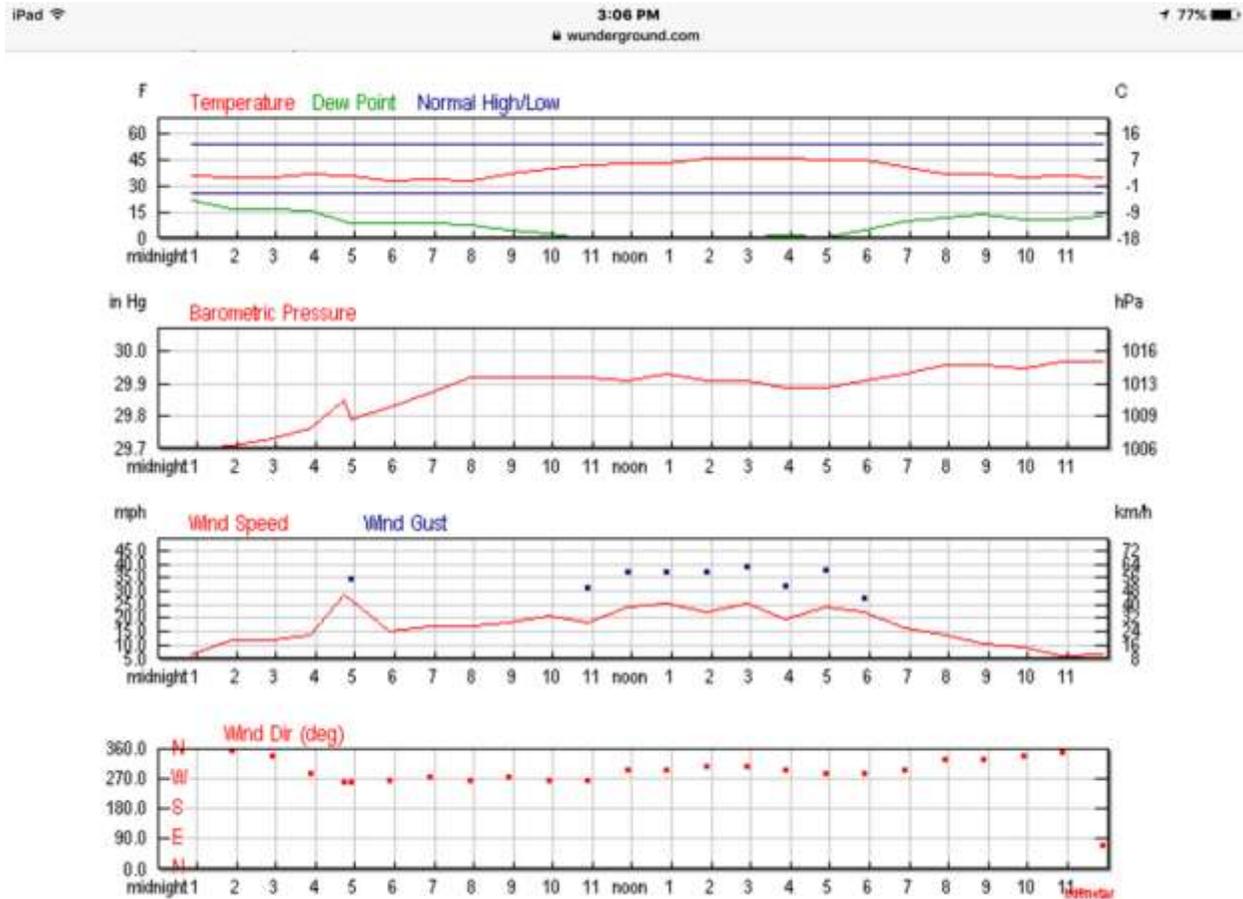
Site Review



On March 15 2016 at approximately 10:34 am. Denver Fire Department was dispatched to a multi-family structure fire, map page Ida 23, at 1515 Grant St. The structure was a type 3 ordinary construction multi-family three story building in a horseshoe shape with the alpha side (address side) facing Grant St. The building was built in 1908 and was approximately 21,564 square feet consisting of 25 units. The building is on “The Hill” just east of Downtown. The initial response was Rescue 1, Hamer 1, Engine 1, Engine 3, Engine 6, Truck 4, Truck 8, Tower 15, Chiefs 2 & 5, and Ops 2. Chief 2 was the first on scene and parked across the street in a parking lot facing the building. Truck 8 was next on scene and went in to investigate. During the time it took to get to the fire apartment on the 3rd floor, units were notified of a party trapped on the 3rd floor balcony of the affected apartment. This party was rescued by two members from Truck 8 and Truck 4. Three of the members from Truck 8 sustained burns and have made full recoveries. The victim was assisted down the ladder to safety, sustaining burns as well and is expected to recover. IC was terminated and all crews were released from the incident.

Weather Conditions

On March 15, 2016 a fire was reported at 1515 Grant Street at approximately 10:34 am. This was a clear and dry day with 10 miles of visibility and temperatures ranging from a low of 32 degrees F to a high of 48 degrees F. Wind was definitely a factor, with sustained winds during the incident ranging from 18 to 20 MPH and gusts up to 32 MPH coming from the northwest.



Construction worker 911 call

Recorded on 15-Mar-2016 at 10.34.02

911 Call Taker: Okay.

Fire Dispatcher: Denver Fire Dispatch.

911 Call Taker: Fifteen fifteen Grant.

Fire Dispatcher: Yes, go ahead.

Male Caller: Uh, yeah, there's- looks like there's a fire at fifteen fifteen Grant, top floor.

Fire Dispatcher: Top floor, what floor is that? How many floors are in that building?

Male Caller: (*inaudible*) it's two.

Fire Dispatcher: Two-story?

Male Caller: Yeah. One, two-

Fire Dispatcher: Okay.

Male Caller: -no, it'd be the third, sorry, it's the third. There's a gentleman out on the balcony. He doesn't seem super concerned, but the- the alarm's going off and there is definitely smoke coming out of there, so...

Fire Dispatcher: Okay, okay, so third, it's the, uh, top floor, third story.

Male Caller: Yeah, right.

Fire Dispatcher: What apartment number? Is it five?

Male Caller: Couldn't tell you. Um, I'm out here on the street. We're working next door.

Fire Dispatcher: Okay. Um, do you see anybody hanging out, or um...

Male Caller: Yeah, he's up on the balcony and he's got a phone, um...

Fire Dispatcher: Okay.

Male Caller: He's, but, yeah, I don't know. He just gave me the wave like it's okay, but I- I don't know, so...

Fire Dispatcher: So what color is the, uh, smoke, sir?

Male Caller: Uh, it's pretty much kind of a medium gray.

Fire Dispatcher: Medium gray?

Male Caller: Yeah (*inaudible*).

Fire Dispatcher: And is the smoke still pretty consistent, or is it dissipating?

Male Caller: It's still coming out of there, yeah, I mean it's a...

Fire Dispatcher: It's coming out of there pretty good?

Male Caller: Oh (*inaudible*) yeah.

Fire Dispatcher: Okay. Now, is there like a tremendous amount of smoke? This guy that's out on the balcony, does it look like, um, does it-

Male Caller: I can see him.

Fire Dispatcher: -look like he's stuck out there?

Male Caller: No, it doesn't look like he's stuck. Like I said, he just looks like he's on the phone talking, but...

Fire Dispatcher: Okay.

Male Caller: ...umm, I, I don't know, it doesn't mean he's got a good handle on what's going on, you know what I mean?

Fire Dispatcher: (*inaudible*) Okay, so, top floor, third story. Which side-

Male Caller: East side.

Fire Dispatcher: East side of the building?

Construction worker 911 call

Male Caller: Yeah.

Fire Dispatcher: Okay, so we got units responding. Thanks for-

Male Caller: Yeah, I hear ya'.

Fire Dispatcher: -this additional information. Is this a good contact number for you, eight, three, two, six, three, eight, eight?

Male Caller: I'm right next door, yeah. Uh, no. (*Caller recites phone number*). Yeah.

Fire Dispatcher: Go ahead, give me your full phone number again, sir.

Male Caller: (*Caller recites phone number*). Yeah, they're here right now, so...

Fire Dispatcher: Five, eight, seven... okay.

Male Caller: Whew!

Fire Dispatcher: Thank you very much, sir.

Male Caller: Yep.

Fire Dispatcher: Alright-

Male Caller: Have a good one.

Fire Dispatcher: Bye.

End of transcript.

Operations

Note- *The following is not a complete transcript of the dispatch recording. Rather, for the purpose of this report, only relevant portions of the transcript were included.*

Recorded on 15-Mar-2016 at 10.34.44

Dispatch: Attention, this will be map page Ida two three, report of a multi-family structure fire, fifteen fifteen Grant Street. Rescue One, Hamer One, Engine One, Engine Six, Engine Three, Truck Eight, Truck Four, Chief Two, Chief Five, and Tower Fifteen is the RIT. Map page Ida two three, report of a multi-family structure fire, fifteen fifteen Grant Street, for Rescue One, Hamer One, Engine One, Engine Six, Engine Three, Truck Eight, Truck Four, Chief Two, Chief Five, Tower Fifteen is the RIT. We'll be operating on TAC Two. Map page Ida two three, report of a multi-family structure fire, fifteen fifteen Grant Street. Rescue One, Hamer One, Engine One, Engine Six, Engine Three, Truck Eight, Truck Four, Chief Two, Chief Five, and Tower Fifteen is the RIT. Operate on TAC two. Time is ten thirty-five.

Chief 2: Chief 2, fifteen fifteen Grant, I have a three story, multifamily residence, nothing showing at this time from the alpha side, Chief 2 will be Grant Street Command, I have, uh, Truck 8, uh, taking the alpha side of the building right now, they're gonna go in and do a, uh, little investigation, all other units level one stage.

(10.36.20)

Chief 2 had a visual on the Delta and Alpha sides as he was arriving on scene. Chief 2 positioned in the parking lot across from the fire building with his car facing 1515 Grant St. Truck 8 arrived on scene from the north and positioned facing south at the Alpha/Delta corner. With nothing showing Truck 8 was in investigation mode.

While Engine 1 was en route from Broadway at 6th, the crews were discussing a long-standing pre-plan of 1505 Grant St. which would require specific positioning to have a water supply and enough pre-connected hose to reach all apartments. The crew members mentioned that 1515 Grant St. is not a common address for them to respond.

Engine 01: Engine One's going to be dragging the line from the corner of Colfax and Grant.

(10.36.27)

At this time Engine 1 was positioned facing east on the west side of Grant on the north side of Colfax in front of 1505 Grant. Engine One C & D were completing the water supply with the hydrant at the NE corner of Colfax and Grant. During this evolution, the crew simultaneously realized that the fire building was down the block. They worked together to change their operations to initiate a forward lay to 1515 Grant St.

Command: Copy, catching the plug from Colfax and Grant. Gimme that line on to, uh, right in front of fifteen oh five Grant. Please leave me a spot open for the next truck right in front of Truck Eight. Tower One, you, uh, coming? Or are you still out of service?

Operations

(10.36.42)

Dispatcher: Break, from Dispatch.

(10.36.45)

911 call taker is on the phone with the resident who is trapped on his balcony.

Command: Yeah, I see that there, Dispatch. Thank you. Tower Four?

(10.36.51)

Dispatcher: Sir, that- so that you are aware, we have a party on the third floor balcony east side, um, I am on the line with the caller. He is stuck at that location.

(10.36.51a)

Truck 4: Truck Four, Seventeenth to Broadway.

(10.37.01)

Command: Okay, copy, uh, east side. Truck Eight, I'm looking at the Alpha side, third floor, it's going to be the north side unit. We do now have smoke coming out of there. Engine One, get me a line up to the third floor.

(10.37.17)

Truck 8 A: Command, Truck Eight

(10.37.20)

Command: Go ahead.

(10.37.23)

Truck 8 A: Hey, there's an odor of burnt food.

(10.37.26)

This transmission is one minute after Truck 8 arrived on scene. Crews were making their way to the stairway entry in the courtyard of the building. Truck 8 A was dealing with a stuck Knox box and a resident came out of the stairwell door, this is when Truck 8 was able to enter the building. The exterior door to the stairwell was chocked open.

Command: Doesn't matter, we do, uh, have, uh, quite a bit of, uh, smoke showing from that Alpha side, guys.

(10.37.33 – no text recorded)

(10.37.34)

Truck 8 A: Copy.

Operations

Engine 3 A: Command from Engine Three, would you like a line to the rear?

(10.37.38)

Command: Uh, no, get me a line to the front, Engine One, uh, still attempting to get that going.

(10.37.44)

Engine 3 A: Engine Three, we're laying in from Sixteenth and Grant.

(10.37.48)

Command: Tower Four, nose to nose with Eights. Get your aerial up into the air. We have, uh, a victim that is, uh, right there on that Alpha side on that balcony.



This picture was taken after the incident and demonstrates the obstruction to the alpha side caused by large trees.

(10.37.56)

Operations

Truck 4 A: Truck 4, copy. We're on scene, on assignment.

(10.38.00 – no text recorded)

(10.38.08)

Truck 4 positioned facing north in front of 1515 Grant St.

Truck 8 A: Command, Truck Eight, we're making entry now, do have smoke.

(10.38.13 – no text recorded)

(10.38.17)

Truck 8 C & D are already inside. These two members reported moderate smoke and heat at chest level in the fire apartment.

Dispatcher: Chief Two and did you copy from Dispatch that we have a party trapped on third floor balcony?

(10.38.23)

Engine 3: Engine Three, we're on-scene, we got a line. Do you want us to go in the [pause] Alpha side?

(10.38.29)

Engine 3 positioned facing south on Grant St. next to Truck 8.

Command: That's right, uh, Engine Three, I'm gonna assign you a fire attack group. You gonna be with Truck Eight Fire Attack Group.

(10.38.36)

Engine 3 A: Copy. We're pulling a 200 foot pre-connect.

(10.38.42)

Engine 3 pulled a 200' pre-connect plus one 50' section of 1 3/4" hose that they have stored on their front bumper.

Operations



This is the courtyard where Truck 8, Rescue 1, Engine 3, and Engine 1 made entry.

Engine 6 A: Command, Engine Six coming on scene, uh, we'll take One's plug.

Engine 1 was now at the address and pulled the 200' 2 ½" front bumper load and started to advance. Engine 1 C & D realized that they would not make the 3rd floor, therefore, added 100' to the dry 2 ½" line in the courtyard with their high-rise packs.

(10.38.47)

Command: Copy that, taking One's plug.

(10.38.52 – no text recorded)

(10.38.55)

Command: All incoming units, we now have heavy smoke issuing from that Alpha side. I have Engine Three taking a line up. Engine One, I need you to do a backup line for me to the third floor. Engine Six is going to be hitting, uh, and completing my water supply from, uh, Engine One.

(10.39.13)

Hamer 1 A: Command, Hamer One's on scene.

Operations

(10.39.17)

Command: Hamer One, give me a primary, second floor.

(10.39.21)

Hamer 1 A: Primary second floor.

(10.39.23)

Ambulance 3: Ambulance Three, we're coming six.

(10.39.26)

Command: Ambulance, I want you to find my Command Post. I'm going to be on the east side of the street. Come and, uh, get your way right here next to me. You can probably get your best access through the alley.

(10.39.38)

Chief 5: Command, Chief Five's on scene.

(10.39.41)

Command: Chief Five, Command Post for me, please.

(10.39.44)

Rescue 1 C: Command, this is Rescue Charlie. We're gonna go inside and start, uh, rescue on third floor.

(10.39.51)

Command: Copy, Rescue third floor.

(10.39.58)

Rescue 1 D: Command, Rescue Delta, roof work would be very beneficial.

At this time Truck 4 A & C were working of the aerial to clear trees to access the roof. Truck 4 B & D were deploying their 28' ground ladder to the balcony to assist with victim rescue. Conditions inside the fire apartment were deteriorating at an extremely fast pace. Rescue 1 D met Truck 8 A at the door of the fire apartment. While Truck 4 is raising their ladder, Truck 8 C & D exit the structure onto the balcony with the victim while there is heavy smoke showing. At this time it is clear that the fire apartment door was chocked open and the first window inside the apartment had already been vented.

(10.40.05)

Command: Copy that. I've got Tower Four making that, uh, happen for you right now. They're gonna pluck that person off of that, uh, fire, we need to get that going right away.

Operations

(10.40.14)

Command: Chief Five, pull your vehicle over to me, right over here. Ambulance, follow him, please.

(10.40.21)

Rescue 1 D: Command, Rescue Delta. Smoke is pushing down quickly.

At this time fire starts to vent from the apartment onto the balcony. Truck 4 B & D are making their way up the ground ladder, Truck 8 C & D are taking a tremendous amount of heat and direct flame impingement while protecting the victim on the balcony. This is when Engine 3 is in the stairwell extending their line by 50' in order to make the apartment.

(10.40.26)



Picture showing Truck 4's ladder position post-incident.

Command: Copy that.

(10.40.29)

Engine 6 A: Command, Engine six, uh, we're hooked into the hydrant. You want us to pull a secondary line off of, uh, One's or Three's?

Operations

(10.40.36)

Command: That's affirmative.

(10.40.38)

Engine 1 A: Command, One's has a two-and-a-half-inch backup to the front door.

(10.40.41)

Command: Okay, start making your way to the third floor.

(10.40.57)

Command: Ambulance crew, bring your ambulance over here.

(10.41.03)

Rescue 1 C: [on air] Command, Rescue Charlie, We have heavy smoke conditions on the third floor.

(10.41.08)

Truck 8 A: [on air] Fire attack from Truck 8 Alpha.

(10.41.11)

Command: Repeat your message.

(10.41.14)

Rescue 1 C: Heavy- heavy smoke conditions on third floor.

(10.41.21)

Command: Copy that. Heavy smoke conditions, uh, let me know when we got a line. That's gonna be Fire Attack Group Supervisor coming from there.

(10.41.30)

Unknown: [on air] Need a line charged, need a line charged.

(10.41.37)

Engine 3 B: Engine Three A, are you ready for water?

(10.41.45)

Tower 15 A: Tower Fifteen on scene, we're your RIT.

(10.41.55)

Command: Copy Tower on scene.

Operations

(10.41.58)

Engine 3 A: [on air] Engine Three, charge the three hundred.

(10.42.00)

Engine 3 B: Engine Three, three-hundred water coming.

(10.42.04)

Command: Tower Four.

(10.42.20)

Engine 03 B: Engine Three A, you got two-hundred water coming.

This is 6 minutes 12 seconds into the incident.

(10.42.32)

Engine 3 C: Copy.

(10.42.34)

Command: Tower Four.

(10.42.37)

Truck 4 A: Go for Tower Four.

(10.42.39)

Command: Joe

(10.42.53)

Command: Fire Attack Group from Command.

(10.42.57)

Engine 3 A: [on air] Fire attack (*inaudible*).

(10.43.01)

Command: [Heavy wind in background] Have we got a line to the third floor?

(10.43.19)

Hamer 1: Command, Command from Hamer One. Be advised we have an air conditioning unit on the Bravo side third floor.

(10.43.32)

Truck 8 C: Truck Eight Alpha from Charlie, we bailed off the porch.

Operations

This is when Truck 8 C & D exited the balcony via Truck 4's ground ladder. This was after a difficult rescue due to the victim's apprehension to get on the ladder. Once Truck 8 C & D were off the porch, Engine 6 started to apply water to the porch from the ground. Engine 6 did not want to put water on the fire earlier due to the victim not wearing a shirt. Their concern was making the patient wet and more difficult to rescue.

(10.43.36)

Truck 8 B: [on air, heavy feedback] copy, bailed off porch, Truck 8 (*becomes inaudible.*)

(10.43.41)

Command: Fire Attack, from Command.

(10.43.45)

Fire Attack: Fire Attack (*inaudible.*)

(10.43.48)

Command: Do I have a line in place on the third floor yet?

(10.43.52)

Fire Attack: [on air, heavy feedback] go 'head.

(10.43.58 – *no text recorded*)

(10.44.08)

Truck 8 C: Fire Attack from [takes breathe] Truck Eight Charlie.

(10.44.13)

Command: Go ahead.

(10.44.15)

Truck 8 C: Did you copy Truck Eight Charlie and Delta are out of the structure?

Truck 8 C & D lost contact with Truck 8 A due to the fact Truck 8 A was on the wrong channel. Truck 8 C & D decided to re-enter the structure to find Truck 8 A. As they re-entered the fire apartment, they encountered Truck 8 A & B and reunited with their crew.

(10.44.23)

Command: [feedback] I did copy.

(10.44.33)

Truck 08 A: Yes, Truck Eight Charlie, Delta, I did copy.

Operations

(10.44.37)

Command: Tower Four, Command.

(10.44.44)

Command: Tower Four, Command.

(10.44.46)

Engine 1 A: Engine One, water, water, Engine One.

This is 8 minutes 31 seconds into the incident.

(10.44.51)

Engine 1: Engine One Charlie, third floor.

(10.44.57)

Rescue 1 D: Command, Rescue Delta, we need to get water on that fire?

(10.45.15)

Command: Denver Health, uh, command from Fire Command.

(10.45.32)

Truck 4 C: Truck Four Alpha, I can't see you up there.

(10.45.40)

Command: Fire Attack, Command.

(10.45.46)

Truck 4 C: Truck Four Alpha, Truck Four Charlie, what do you need me to do? Can't see the tip.

(10.45.55)

Command: RIT, Command.

(10.46.00)

Tower 15 A: RIT Team go ahead.

(10.46.02)

Command: Yeah L.T. go ahead and give me your best three sixty, uh, around this building, uh, go ahead and soften it up as you're going around and get yourself in a position that's convenient for you to make entry into this location if you need to.

Operations

(10.46.15)

Tower 15 A: Copy, Chief. We're set up on the, uh, Delta Alpha corner now. I'm on the Delta side. Looks like this has extended down about mid-building. We're getting smoke down in the back three quarters now.

(10.46.26)

Command: Okay, copy for that update. Break. Fire Attack, Command.

(10.46.34)

Command: Fire Attack, Command, Truck Eight, Command.

(10.46.42)

Command: Engine Three, Command.

(10.46.47)

Rescue 1 C: This is Rescue Charlie on third, what do you need?

Rescue 1 C replied because Engine 3 A was on the wrong channel.

(10.46.58)

Truck 4 A: Command, Truck Four, be advised I'm entering the roof.

(10.47.02)

Truck 4 A: Copy that.

(10.47.11)

Rescue 1 C: [on air] Command, Rescue. Main body of fire is knocked. We may have some hot spots in the fire room.

Engine 3 went as far as their hose would allow, hitting fire along the way. It was reported that conditions did not improve until Engine 3 opened their bale wide-open for an extended time. Also, this is when Engine 6 completed hitting the main body of fire from the ground. Engine 6 then climbed the ladder and started to hit hotspots from the balcony itself.

(10.47.22)

Command: Copy Rescue, thank you for that update. Fire Attack, from Command.

(10.47.33)

Rescue 1 A: [on air] Command, this is Rescue One. Negative up there for a primary.

(10.47.50)

Operations

Command: Uh, will the last (*unknown*) repeat itself, please?

(10.47.54)

Rescue 1 A: [on air] Command, Rescue. Primary, third floor, negative.

(10.48.00)

Command: Okay primary. Uh, Rescue, I'm gonna make you Fire Attack Group Supervisor. I cannot get a hold of Truck Eight or Engine Three. Please give me an update from that fire unit, and give me an update travelling back toward the Charlie side. I need ceilings pulled.

This was due to Truck 8 A and Engine 3 A being on channel 1.

(10.48.15)

Rescue 1 A: [on air] Copy that, main body of fire has been knocked. We are working- working our way back to the Charlie side and there's no extension. Clear primary of the fire room.

(10.48.28)

Chief 6: Chief Six to Command. Fire Attack ended up on Channel One. I'm trying to get them over to your channel right now.

(10.48.49)

Command: Repeat that, Ryan.

(10.48.51)

Chief 6: Fire Attack is on Channel One. I'm trying to get him to your channel right now. He's okay.

(10.48.56)

Command: Copy, thanks.

(10.48.57)

Truck 8 A: [on air] Command, this is Fire Attack, we do have the fire knocked, [heavy feedback] hot spots.

Operations

(10.49.12) Below is a photo of the fire apartment, A/B corner of structure.



Command: Fire Attack Group, have radios turned down. I cannot make you out.

(10.49.20)

Truck 8 A: [on air] Think we've got the fire knocked; we're getting hot spots.

(10.49.24)

Command: Copy that.

(10.49.29)

Rig Placement Map



Observations and Recommendations

Observation 1:

Incident Command Operations

Reference:

Denver Fire Department Standard Operating Guidelines 2110.01, 2110.2, 2111.01, 2111.02
National Incident Management System, Department of Homeland Security, 2008 Edition.

Analysis:

- No confirmation from Truck 8 A acknowledging assignment as fire attack group supervisor.
- Lack of additional apparatus during an all-hands fire.
- Safety Officer should ensure an ambulance is on scene at all times. The ambulance at this scene transported a civilian patient and was not replaced during the remainder of the incident.
- IC acknowledged life safety concern immediately and echoed to dispatch.
- Immediate incident debriefing was conducted by the IC.
- IC maintained RIT discipline throughout incident.

Recommendation:

- Incident Commanders must confirm assignments, especially assignments to ICS call signs (Groups/Divisions) with companies assigned.
- ICs should request additional companies in staging.

Observation 2:

Truck Company Operations

Reference:

Truck Company SOG

Analysis:

- Two truck companies spotted nose-to-nose at front of the building.
- Flow path established by chalking exterior stairwell door, apartment door, and breaking of fire escape window.

Observations and Recommendations

- Rapid deployment of ground ladder was instrumental in victim and firefighter rescue.
- Multiple means of alternative egress could have been established.
- A company was assigned to the roof after ventilation was complete.
- Complete complement of tools including striking, prying, pulling, TIC, and light water were in place.

Recommendation:

- Be mindful of flow path and fire/smoke conditions prior to chalking doors and opening windows.
- Ventilation must be coordinated with properly placed hose lines.
- Once vertical ventilation is complete, companies should not be assigned to the roof.
- Use of light water delayed fire growth allowing members to access victim and escape.

Observation 3:

Engine Company Operations

Reference:

Engine Company SOG

Analysis:

- Hose line selection: both interior hose lines fell short and had to be extended.
- 2 ½" hose line taken in as a backup line.
- Hooking up hose lines for master stream prior to charging an offensive line.
- Sporadic opening of an attack line in a high heat environment.
- Lack of applying water from ground level to balcony to protect firefighters and victim.

Recommendation:

- If 2 ½" hose line is deployed, inform IC to acquire additional staffing.
- Company officers assigned to engine companies should strongly consider pulling a 300' line as opposed to 200' for any residential buildings over two stories.
- Consider alternative hose stretches that match district needs, i.e. courtyard stretch.
- Interior lines take precedence over master stream set-up.
- In high heat conditions consider continuous application of water until conditions improve.
- Protection of firefighters and victims in imminent danger takes precedence over opposing streams or steam production.

Observations and Recommendations

Observation 4:

Safety and RIT operations

Reference:

RIT SOG

Analysis:

- IC assigned and maintained RIT until fire was in post-control overhaul.
- Ambulance on-scene not replaced after transporting victim.
- Crew integrity of crew in fire apartment was lost in rapidly developing fire conditions (Truck 8).
- Contact not established between members (Truck 8).
- Crew on balcony considered bailing off balcony due to fire conditions.
- Minimal time spent in rehab by crews worked in an IDLH environment.

Recommendation:

- Safety Officer/IC should maintain ambulance on-scene for duration of incident.
- If a member's location is unknown and communication cannot be established by company members or IC, urgent traffic or mayday initiation should be a priority.
- The department should consider bail out systems and requisite bail out training.
- A full-time dedicated staff in safety and training for in-service training in fire ground operations including firefighter safety and survival.
- Standardization of rehab practices should follow national models.

Observation 5:

Administration

Reference:

None

Analysis:

- Truck 8 drove three members to Denver Health for treatment.
- Denver Health was not notified of incoming firefighter injuries.

Observations and Recommendations

- Members spent an inordinate of time (approximately five hours) in COSH clinic and at Safety and Training for gear replacement, all without concern for food, water, or decontamination.
- Members called family en route to hospital.
- Concern for the well-being of members was secondary to Department operations.

Recommendations:

- Firefighter injuries at emergency scenes should be transported by ALS ambulance to the hospital. Additionally, the balance of the member's crew should be taken out of service.
- A DFD liaison should assist with the injury process to address the immediate needs of the member and their family.
- The Denver Fire Department should consider creating a Standard Operating Procedure to outline how they will address the notification, transportation, and assistance to the family of the injured member.