District of Columbia
Fire and Emergency Medical Services Department

Incident Review Committee

Report

Structure Fire – 809 F Street N.E.

Washington, DC

Incident Date – August 2, 2017

March 31, 2018

Incident Review Committee
809 F Street N.E.
Incident Date –August 2, 2017

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Fire and EMS Department

The District of Columbia Fire and EMS Department protects the lives and property of over 600,000 residents of the District of Columbia as well as the thousands of visitors and workers who are in the city each business day. The area served by the D.C. Fire and EMS Department covers 68.3 square miles and is bordered by the states of Maryland and Virginia.

The Department had responded to166,520 incidents as of August 1, 2017 which can be categorized as follows:

- Fire related responses
  - 29,461
- EMS related responses
  - 137,059

During that same period, Engine Company 3 responded to 2,821 calls for service and Truck Company 7 responded to 2,254 calls for assistance.

The D.C. Fire and EMS Department is comprised of dual role and single role professional firefighters and EMS personnel. The District of Columbia maintains 33 fire stations with 33 engine companies (of which, 21 are staffed with a paramedic), 16 aerial ladder truck companies, 3 heavy-duty rescue squads, 1 hazardous materials company, 4 fire boats, and 44 EMS transport units. Engine companies are staffed with an officer and 3 firefighters. Aerial ladder truck companies and rescue squads are each staffed with an officer and 4 firefighters.

There are four shifts (platoons) providing coverage, with each platoon working a 24-hour day that begins at 7:00 a.m. On each platoon there are seven (7) Battalion Fire Chiefs and a Deputy Fire Chief assigned to the Operations Division and Special Operations Division. A Lieutenant or a Captain is assigned to each engine, truck, and rescue squad on each shift. A Sergeant is assigned to each of the ladder trucks and is used to replace regularly assigned officers in the Operations/Special Operations Division that may be absent (i.e., annual leave, training, etc.).

The standard initial assignment for a reported structure fire is referred to as a "box alarm" and includes the following:

- 5 Engines
  - The 1st and 3rd due Engines report to the front of the structure
  - The 2nd and 4th due Engines report to the rear of the structure
  - The 5th due Engine is assigned as the Rapid Intervention Crew
- 2 Trucks
  - The 1st due Truck reports to the front of the structure
  - The 2nd due Truck reports to the rear of the structure
- 2 Battalion Fire Chiefs
  - The 1st due Chief is assigned as the Incident Commander
  - The 2nd due Chief is assigned as needed, at the discretion of the Incident Commander
- 1 Rescue Squad
- 1 Ambulance

Incident Review Committee

The following individuals were appointed to the D.C. Fire and EMS Department's Incident Review Committee by Fire & EMS Chief Gregory M. Dean:

Chairperson:

- Charles Battle, Battalion Fire Chief - Washington, D.C. Fire & EMS Department

Members:

- Christopher Sefton, Battalion Fire Chief - Washington, D.C. Fire & EMS Department
- Michael Knight, Battalion Fire Chief - Washington, D.C. Fire & EMS Department
- Daniel Mccoy, Battalion Fire Chief - Washington, D.C. Fire & EMS Department
- Mitchell Kannry, Battalion Fire Chief - Washington, D.C. Fire & EMS Department
- Gary Steen, Battalion Fire Chief -Washington, D.C. Fire & EMS Department
- Shawn Downs, Captain - Washington, D.C. Fire & EMS Department
- Brian Gray, Captain- Representative for International Association of Firefighters, Local 36
- Jeffrey Folts, - Detective, Metropolitan Police Department (MPD)

Goals and Objectives

The findings provided herein outline a summary of the events that led to the injury of a member of the D.C. Fire and EMS Department.

The Incident Review Committee followed the International Association of Firefighters (Division of Occupational Health, Safety and Medicine) Investigation Manual for Firefighter Line of Duty Death or Injury as a resource for the proper way to memorialize their findings.

This document is designed to be easily understood by audiences of varying backgrounds and will provide a descriptive analysis of the contributing factors and recommendations required to correct all concerns.

The primary purpose of the investigation is to identify any actions that can be initiated to prevent future occurrences of injury or death. The report does not determine fault or assign blame.

Acknowledgements

The Incident Review Committee acknowledges the following individuals and organizations that assisted the committee in completing this report:

- Detective Jeffrey Folts- Metropolitan Police Department
- Safety Engineer Timothy R. Merinar- National Institute for Occupational Safety and Health (NIOSH)
- Safety and Occupational Health Specialist Karis M. Kline- National Institute for Occupational Safety and Health (NIOSH)

Signature Page

We the undersigned certify that we have actively participated in the creation of this report and approve the disbursement of this document to the D.C. Fire and EMS Chief and/or his designee

X _____ 4/4/18
BFC Charlie Battle
Chairman

X _____ 3-31-18
BFC Christopher Sefton
Committee Member

X Michael Knight 3-31-18
BFC Michael Knight
Committee Member

X _____ 3-31-18
BFC Daniel Mccoy
Committee Member

X _____ 4/6/18
BFC Mitchell Kenny
Committee Member

X _____ 4-4-2018
BFC Gary Steen
Committee Member

X _____ 3-31-18
Captain Shawn Downs
Committee Member

X _____ 4-12-18
Captain Brian Gray
Local 36 Representative

Executive Summary

In the late evening hours of August 2, 2017, a house fire was reported in the area of 8th St. and F St. N.E Washington, D.C. A box alarm assignment was dispatched and units subsequently found a house on fire at 809 F St. N.E. While units were responding into the scene, the 1st due Truck Company (Truck Company 7), unwittingly struck the firefighter (Lineman) from Engine Company 3, temporarily pinning him between the rear of the engine and the side of the ladder truck.

As soon as members became aware that a firefighter was injured, Truck Company 7 immediately backed-up and observed Engine Company 3's Lineman fall to the ground with critical injuries. Members from Engine Company 3, Truck Company 7, and Engine Company 6 began immediate life saving measures. The Lineman from Engine Company 3 was transported to Medstar Hospital by Medic 3 with life threatening injuries.

Fireground operations continued without interruption concurrent with the medical interventions provided to the injured member. The fire was held to the original fire building and was eventually extinguished by units on the scene. It was not until after the fire was extinguished that the gravity of the situation became apparent to members on the incident.

At the request of the Fire and EMS Chief, a review committee was formed to investigate the incident. The goal of the committee was to determine the facts of how this incident occurred, identify any contributing factors, and offer recommendations for how to prevent future incidents.

What is contained herein is the culmination of the committee's work, including interviews with over forty members, examination of physical evidence, and our best efforts (in concert with the Metropolitan Police Department Crash Investigation Team) to establish a recreation of the incident scene.

Location of Incident (Intersection)

Investigation Summary

On August 2, 2017, a firefighter (Lineman) assigned to Engine Company 3 was critically injured when he was pinned between a moving ladder truck and a stationary engine while performing firefighting duties in response to an indent at 809 F St. N.E.

At 11:33 pm, a box alarm assignment for the report of a house fire near the intersection of 8th St. and F St. N.E. was dispatched on radio channel 01. The order of dispatch was: Engine Company 3, Engine Company 18, Engine Company 8, Engine Company 2, Engine Company 6, Truck Company 7, Truck Company 4, Battalion Fire Chief 6, Battalion Fire Chief 3, Rescue Squad 3 and Ambulance 13.

While responding into the scene, Engine Company 6 and Engine Company 18 arrived out of sequence and requested that the order of dispatch be changed since no other units had committed to any assigned tasks at that time.[1]

The Officers in Charge (OIC) of Engine Company 6 and Engine Company 18 requested on radio channel 07 that they be placed 1st due on the box alarm assignment. Engine Company 6's request was not acknowledged. Engine Company 18 was granted permission to take 1st due position, and the response assignment was adjusted.

The new order of dispatch was: Engine Company 18, Engine Company 8, Engine Company 3, Engine Company 2, Engine Company 6, Truck Company 7, Truck Company 4, Battalion Fire Chief 6, Battalion Fire Chief 3, Rescue Squad 3 and Ambulance 13. [2]

Dispatched units continued to the scene to take their assigned positions. Engine Company 3 took a position at a hydrant in the 800 block F St. N.E. and its members prepared to deploy a backup attack line. Once Truck Company 7 entered the block to turn east onto the 800 block of F St. N.E., the Wagon Driver from Engine Company 3, motioned for Truck Company 7 to stop so that he could remove the humat valve from the middle of the intersection.

Truck Company 7 stopped as requested and then continued to proceed into the block. As the apparatus was moving past Engine Company 3, it stopped abruptly as it appeared that Truck Company 7 had made contact with Engine Company 3.

As soon as members became aware that there had been an impact, Truck Company 7 immediately backed-up. At that time, it became apparent that the Lineman (Engine Company 3) had been struck and temporarily pinned between the rear of Engine Company 3 and Truck Company 7. Members immediately exited Truck Company 7 and collectively worked with members from Engine Company 6 and Engine Company 3 to render aide.

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[1] D.C. Fire and EMS Department SOG's allows for companies to request a change in assignment if they are closer to the incident than other units responding to the scene.

[2] D.C. Fire and EMS Department SOG's require that 2 Engine Companies and a Truck Company report to side A of the building and 2 Engines and a Truck report to side C of the building. Per the new dispatch assignment, Engine Companies 18, 3, and Truck 7 were to report to side A of the structure. Engine Companies 8, 2, and Truck 4 were to report to side C of the structure.

An initial radio transmission was made to Battalion Fire Chief 6 which stated a person was injured and needed immediate medical attention. Ambulance 18 and Medic 3 assisted along with EMS 6. The Lineman was subsequently treated and transported to MedStar Washington Hospital Center for immediate medical care.

Detailed description of the investigation and the information found:

The Safety Officer was dispatched per Standard Operating Guidelines on the Working Fire Dispatch as the Incident Safety Officer. After performing his normal fireground activities, he was notified that there was a significant Firefighter injury and began his accident investigation.

The Safety Officer reported to the intersection of 8th and F St. N.E. and began to take pictures of the apparatus. Pictures were taken of Engine Company 3, Truck Company 7, and the intersection.[3]

Initial investigative measures were conducted by the on-duty Safety Officer Captain Shawn Downs, who was later joined by Deputy Fire Chief Kenneth Crosswhite and Assistant Fire Chief David Foust. Additionally, the Metropolitan Police Department Major Crash Investigation Team was dispatched and worked with the members of D.C. Fire and EMS to investigate the incident. The members of MPD included Detective Michael Pepperman, Detective Phuson Nguyen and Lieutenant Ronald Wilkins. MPD later reassigned the case to Detective Jeffrey Folts (who maintained the investigation lead throughout the remainder of the investigation).

The investigation revealed that Engine Company 3 was positioned near the hydrant located at the southeast corner of the intersection on F St. N.E (800 block). Engine Company 3 had positioned the rear of their apparatus so that it was protruding into the intersection and was so angled that the driver's side was further into the intersection than the officer's side.

Truck Company 7 turned into the 800 block of F St. N.E. from Northbound 8th St. N.E. and had to stop in a semi jack-knifed position while Engine Company 3's Wagon Driver was clearing a humat valve from Engine Company 18 (which was in the middle of the road obstructing the roadway). [4]

The position of Truck Company 7 was such that the tractor portion of the apparatus was in the 800 block of F St. N.E. (alongside the driver's side of Engine Company 3) while the trailer portion of the apparatus remained on 8th St. N.E. This spatial dynamic left the Truck Driver with no line-of-sight to the rear of Engine Company 3 or the majority of the trailer. This position put the trailer directly behind Engine Company 3 and left an approximate two-foot gap between the back step of Engine Company 3 and the officer's side of Truck Company 7's trailer.

While the truck was stopped, the Lineman and Layout man from Engine Company 3 moved into the gap between Truck Company 7 and Engine Company 3 and were attempting to pull their 400' attack line. This action diminished the ability of the Truck Driver and Tillerman to observe

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[3] The initial pictures are after Truck Company 7 had already repositioned.

[4] A humat valve is a water appliance connected to a supply line that is used to receive and relay water.

them and to safely proceed further in to the block. It is estimated that Truck Company 7 was stopped for 10-15 seconds.

Once this obstacle was cleared, the Wagon Driver from Engine Company 3 motioned for Truck Company 7 to proceed into the block. It is unclear if there was any communication between the Truck Driver and Tillerman before they began moving into the block.[5]

During the time that Truck Company 7 began to pull forward, Truck Company 4 (2nd due) came through the intersection of 8th St. and F St. N.E. traveling southbound on 8th St N.E. The position of Truck Company 4 occupied the southbound lane of 8th St N.E., opposite of F St. N.E. This prohibited the Tillerman of Truck Company 7 from steering the trailer further into 8th St. N.E. to assist in making the turn onto F St. N.E. (generally done to increase turning radius), due to the potential to strike Truck Company 4.

While Truck Company 7 was in the turning position, the area on the trailer (immediately behind the fifth wheel and around the outrigger controls) was not visible to the Tillerman. When Truck Company 7 moved forward at a very slow speed to complete their turn onto F St. N.E., the trailer made contact with the Lineman (who was grabbing a hose load and had stepped behind the driver's side rear compartments of Engine Company 3).

Just as Truck Company 7 moved forward, the Tillerman and Barman (in the cab of Truck Company 7) observed that it appeared that the side of the truck had struck the rear of Engine Company 3. Members immediately shouted for the Truck Driver to stop concurrent with the Tillerman's reaction to depress the stop buzzer. The Tillerman communicated with the Truck Driver to backup, and when they did, the Tillerman saw the injured firefighter fall from between the two pieces of apparatus. Members from Engine Company 3 (Officer in Charge and Layout man), Engine Company 6 (entire crew) and Truck Company 7 (Barman and Hookman) immediately began to render aide.

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[5] During the interview process, neither the Truck Driver nor the Tillerman from Truck Company 7 could recall with great detail if communication was initiated prior to or after the significant incident.

Incident Timelines (Radio/CAD Data Summary)[6]

- 23:30:14… initial 911 call… caller advised that a house was on fire at the intersection of 8th & F St N.E.
- 23:30:16… 2nd call …caller advised that he can see a house on fire from the building across the alley… the caller was located in the 500 block of 9th St N.E. … the caller also gave 8th & F St southeast corner … 2 houses in ..facing F street
- 23:31:38… the 2nd call was entered into CAD (the second call was entered and sent before the first call)
- 23:32:57… Engine 3 (3.1min); Engine 18 (3.2 min); Engine 8 (4.2 min); Engine2 (4.8 min); Engine6 (5.0 min); Truck 7 (3.1 min); Truck 4 (5.7 min). BC6; BC3; rescue 3 and Ambulance 13 were dispatched
- 23:35:24… Engine 18 arrived
- 23:35:26… Engine 6 arrived
- 23:35:55… Engine 3 arrived
- 23:36:05…. Truck 4 arrived
- 23:36:09…. Truck 7 arrived
- 23:36:35… Engine 18 advises the address is 809 F St. 2 Story … smoke showing.
- 23:36:47… Truck 7- **"PRIORITY!"** Man down behind the engine 3 hit by the fire truck
- 23:37:07…. BC6 (could not have heard the transmission) advised he copied the corrected address
- 23:37:20… Engine 3 advises "Scene priority; member was hit by a truck; unconscious, need a medic; 8th & F; also need someone to take the line."
- 23:37:31…. Medic 3 is dispatched (3.1 min)
- 23:37:48… Engine 6 to BC 6… advises to take truck 7 & 3 engine out on this one ... need a medic 8th & F St N.E. … Priority 1 struck by vehicle.
- 23:41:21…. Medic 3 in on the scene (avl)
- 23:41:29… Working Fire Dispatch
- 23:42:51… Medic 3 is transporting (AVL)
- 23:44:16… 2nd alarm Dispatched
- 23:45:57… Medic 3 notifies Med star … 3-5 min ETA ... trauma to the chest and head
- 23:46:12… BC6 advises cave in support not needed
- 23:50:51… Medic 3 arrives at Med-star (AVL)
- 23:58:04…. All visible fire has been knocked down ... checking for hot spots
- 00:01:36…. BC4 responding to med-star to checking on members... staging units can return to service, with the exception of Engine 7, Engine 4 and truck 10
- 00:02:26… BC6 requested animal control for cat in the building
- 00:24:44… BC6 advices any unit needing debriefing/PISD respond to the command post
- 00:28:22… BC6 advises truck 7 to remain out of service.. they are not to return to service

[6] These times are approximate and are not considered to be absolute with regard to arrival of units on scene.

- 02:10:43.... BC6 advises remaining units to return to the firehouse out of service for rehab.. and a quick visit to med-star (if you want)

Company-Specific Actions

Engine Company 18

Initially dispatched 2nd due Engine (in quarters), but arrived after Engine Company 6 and just prior to Engine Company 3. The following radio traffic occurred:

- E-18 – "Engine 18 is on the scene, request permission...(inaudible)"
- Battalion Fire Chief 6 – "last unit you were broken up, I need the corrected address, what's the corrected address?"
- E-18 – "Engine 18 is on the scene, we are able to take 1st due. We have a hydrant at 8th and F, I'll call you back with a corrected address Chief."
- Battalion Fire Chief 6 – "Ok, Engine 18 is going to take 1st due on the assignment"

Engine Company 18 laid a supply line from the northeast corner of the intersection, and left the humat valve in the middle of the street. The hydrant at the intersection was actually located on the southeast corner of the intersection. They were assigned to the Attack Group and followed all Department SOG's once inside the structure.

Engine Company 3

Dispatched as 1st due Engine (in quarters) and arrived right behind Engine Company 18. Battalion Fire Chief 6 asked them to take the 2nd due position, but the Officer in Charge stated they were in position to pick up Engine Company 18's supply line, and were reassigned as 3rd due. The following are the actions of the members of Engine Company 3:

Wagon Driver

The Wagon Driver placed the wagon in the 800 Block of F St. N.E. in a position to hook-up to the hydrant utilizing his front soft sleeve. The Wagon Driver exited the apparatus and cleared Engine Company 18's humat valve from the middle of the street and then waved Truck Company 7 into the block.[7]

Lineman (injured firefighter)

The Lineman exited on the officer's side of the apparatus (right side) and went to the rear of the vehicle via the right side of the apparatus and prepared to deploy the 400' inch and one-half attack line.[8]

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[7] The Wagon Driver –member that has the responsibility of operating the apparatus (Engine) on all assigned responses. This member is usually a Technician but any member qualified to drive can be assigned to that position for that tour of duty. Note: The Wagon Driver on duty was not a regularly assigned Technician, and was a fill-in driver

[8] Lineman- member that has the responsibility of operating the hose line and extinguishing all visible fire. This member is usually anyone assigned to that position for that tour of duty.

Layout man

The Layout man exited on the driver's side (left side) and went towards the rear of the vehicle via the left side of the apparatus to assist in deploying the hose line. Once at the rear of the apparatus, the Layout man stated he had to turn sideways and squeeze between a stopped Truck Company 7 and the rear of Engine Company 3. He then had to move past the Lineman at the rear of the apparatus, to take a position to assist in deploying the 400' inch and one-half attack line.[9]

Officer in Charge

The Officer in Charge (OIC) ordered the Lineman and Layout man to deploy the 400' inch and one-half attack line (located on the driver's side rear of the apparatus). The OIC initially took a few steps to move towards the fire building. He then stopped and went back to the rear of the apparatus to assist with deploying the attack line. Once he saw the position of Truck Company 7 in relation to Engine Company 3, he told his crew members to "hold-up" but at that point, Truck Company 7 had already begun to move forward.

The OIC stated that as the apparatus converged at an extremely slow speed, the Lineman's body was lifted off of the ground. The OIC grabbed the Lineman's SCBA straps and held onto him in an attempt to support him while shouting for Truck Company 7 to back-up. Once Truck Company 7 backed-up, the OIC stated that he along with the Layout man (Engine Company 3) and other companies began to render aide to the injured firefighter.

While care was being provided to the Lineman, the OIC made a "Priority" radio transmission to Battalion Fire Chief 6 advising of an unconscious member that was struck by a truck and that additional resources were needed.[10]

Truck Company 7

Truck Company 7 was dispatched as the 1st due Truck and approached the scene by responding Northbound on 8th St. N.E. As Truck Company 7 attempted to navigate the right turn onto F St. N.E., they had to come to a complete stop in order for the Wagon Driver from Engine Company 3 to remove Engine Company 18's humat valve from the middle of the street on F St. N.E. The Tillerman states that after stopping, Truck Company 4 came through the intersection which limited his ability to maneuver the trailer into the intersection and around Engine Company 3.

Once the humat valve was cleared from F St. N.E., Truck Company 7 began to move forward to complete their turn into the block. Due to the position of the tractor, the Truck Driver had a limited view of the trailer and the side of Engine Company 3. When the truck started to move,

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[9] The Layout Man - member that has the shared responsibility of ensuring that a water supply has been established. Member works in concert with the Wagon Driver and when not assisting in that capacity is responsible for working with the Lineman to ensure all visible fire has been extinguished.

[10] Officer in Charge - member of the rank of Sergeant, Lieutenant, or Captain that is responsible for the day to day activities of his company in and out of quarters. This member is a supervisor and directs his crew towards the completion of an assigned task. Note: The OIC was a Sergeant and not the regularly assigned Officer on duty.

the Tillerman believed that the trailer had struck Engine Company 3 and immediately said "Stop, stop, stop!" [11]

As Truck Company 7 backed-up, the Tillerman stated he saw a firefighter fall from in between Truck Company 7 and Engine Company 3. He advised the rest of the crew and they all exited the apparatus. The members of Truck Company 7 along with the members of Engine Company 3 began to assist the Lineman from Engine Company 3.

The officer from Truck Company 7 made a "Priority" radio transmission to Battalion Fire Chief 6 informing him of a man down that was struck by the fire truck.

Note: The Truck Driver was the regularly assigned Technician (Tillerman). The Tillerman was not a technician and was a fill-in driver. Both drivers were wearing the voice-communication headset system.[12]

Engine Company 6

Engine Company 6 was dispatched as the 5th due Engine but was the first unit to arrive at the intersection of 8th and F St. N.E. and relayed the same to BFC 6 (in an attempt to request 1st due). This radio transmission was never acknowledged and they maintained a position at the southwest corner of 8th and F St. N.E. The crew witnessed the incident from the opposite side (driver's side) of Truck 7 and immediately reported to the rear of Engine Company 3 and began rendering aid to the Lineman from Engine Company 3.

The officer from Engine Company 6 transmitted a "Priority" radio message to Battalion Fire Chief 6 advising of someone being struck by a vehicle and the need for additional resources. After they rendered care and Engine Company 3's Lineman had been transported, they were reassigned to firefighting duties by the Incident Commander.

Battalion Fire Chief 6

Battalion Fire Chief 6 (BFC 6) was dispatched as the 1st due Battalion Chief (Incident Commander). BFC 6 acknowledged the radio transmission from Engine Company 18 which stated that they were on the scene and reassigned them to 1st due Engine. BFC 6 then reassigned companies as previously noted above.

BFC 6 initially received radio reports of an injured person and directed EMS units on the scene to assist with patient care. At no time was Battalion Fire Chief 6 fully aware that the intent of the "Priority" radio transmissions he was receiving, (from multiple companies) specifically advised of the injury to the Lineman from Engine Company 3.

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[11] Truck Driver- member that has the responsibility of operating the apparatus (Truck) on all assigned responses. This member is usually a Technician but can be anyone assigned to that position for that tour of duty.

[12] Tillerman- this member has the responsibility of operating the rear tiller portion of the apparatus (Truck) on all assigned responses. This member is usually a Technician but can be anyone assigned to that position for that tour of duty.

Once BFC 6 recognized that the injured person was a firefighter, BFC 6 tasked the Safety Officer with investigating the circumstances of the injury.[13]

Truck Company 4

Truck Company 4 was dispatched as the 2nd due Truck and approached the incident from southbound on 8th St. N.E. As they approached the intersection of 8th St. and F St. N.E., they saw Truck Company 7 attempting to navigate the turn onto F St. N.E., however they (Truck Company 7) were stopped. Truck Company 4 then went through the intersection and took a position on 8th St N.E. to cover the rear of the affected structure, and perform their assigned responsibilities.

Response Routes and Positioning

The response routes for units are the result of a review of the interviews and what information was provided.

Engine Co. 6

Arrival Order – 1st Arriving Unit to the Intersection of 8th and F Street N.E.
Dispatched Assignment – 5th Due Engine
Location upon Dispatch and Route Traveled – New Jersey and H St N.W. at Dispatch. Traveled New Jersey Ave to Massachusetts Avenue, traveled around Union Station on Massachusetts Avenue to D Street N.E., Left on 6th Street, Right on F Street to Intersection of 8th and F Street N.E.

Engine Co. 18

Arrival Order – 2nd Arriving Unit
Dispatched Assignment – 2nd Due Engine
Location upon Dispatch and Route Traveled – In quarters at Dispatch. Traveled North on 8th Street S.E., Right on F Street to 809 F Street N.E. (Laid out 8th and F Street).

Engine Co. 3

Arrival Order – 3rd Arriving Unit
Dispatched Assignment – 1st Due Engine
Location upon Dispatch and Route Traveled – In quarters at Dispatch. Traveled South on New Jersey Ave N.W. to D St heading East, Left on 6th Street N.E., Right on F Street into intersection at 8th Street and F Street N.E. (picked up 18's line)

[13] A member of the rank of Battalion Fire Chief who is responsible for establishing the action plan required to mitigate the incident. This member orders, directs and manages all resources on the scene.

Truck Co. 7

Arrival Order – 4th Unit (Truck 7 and Truck 4 arrived at approximately the same time)
Dispatched Assignment – 1st Due Truck
Location upon Dispatch and Route Traveled – In quarters at Dispatch. Traveled North on 8th Street S.E. Right on F Street N.E.

Truck Co. 4

Arrival Order – 4th Unit (Truck 7 and Truck 4 arrived at approximately the same time)
Dispatched Assignment – 2nd Due Truck
Location upon Dispatch and Route Traveled – New Jersey Ave N.W. and P Street at Dispatch. Traveled New Jersey Ave N.W. to Left on H Street, East on H Street to R on 8th Street N.E. Stopped at alley entrance at 519 8th Street N.E.

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Engine Company 3 Lineman's Training and Experience

Engine Company 3's Lineman began his career as a member of Recruit Class 378 on September 19, 2016. He was instructed in the following deliverables and graduated from the District of Columbia Fire and Emergency Medical Services Training Academy on April 26, 2017:

- Fire Fighter 1
- Fire Fighter 2
- Nationally Registered Emergency Medical Technician
- CPR
- Hazardous Materials Operations
- Hazardous Materials Awareness

Upon graduation, he was assigned to Paramedic Engine Company 3 located at 439 New Jersey Avenue N.W. As a recently graduated Recruit, he was still in his probationary period and was required to take monthly tests to attest to his proficiency and job knowledge.

The Lineman from Engine Company 3 had previously responded to many calls for reported structure fires that subsequently were mitigated by other units on scene; however, he had limited to no experience with responses where the structure was actually on fire.

Engine Company 3 Officer's Training and Experience

Engine Company 3's Officer began his career on December 15, 2003. He was promoted to the rank of Sergeant in June of 2014. He was instructed in the following deliverables and graduated from the District of Columbia Fire and Emergency Medical Services Training Academy:

- Fire Fighter 1
- Fire Fighter 2
- Nationally Registered Emergency Medical Technician
- CPR
- Hazardous Materials Operations
- Hazardous Materials Awareness
- Fire Officer 1
- Fire Instructor 1

Truck Company 7 Truck Driver's Training and Experience

Truck Company 7's Truck Driver began his career on October 10, 2000. He was instructed in the following deliverables and graduated from the District of Columbia Fire and Emergency Medical Services Training Academy:

- Fire Fighter 1
- Fire Fighter 2
- Nationally Registered Emergency Medical Technician
- CPR
- Hazardous Materials Operations
- Hazardous Materials Awareness

Upon graduation, he was assigned to Truck Company 7 located at 414 8th Street S.E. This member is qualified to operate the apparatus in the assigned position for his tour of duty and holds the rank of Firefighter Technician.[14]

Truck Company 7 Tillerman's Training and Experience

Truck Company 7's Tillerman began his career on March 4, 2004. He was instructed in the following deliverables and graduated from the District of Columbia Fire and Emergency Medical Services Training Academy:

- Fire Fighter 1
- Fire Fighter 2
- Nationally Registered Emergency Medical Technician
- CPR
- Hazardous Materials Operations
- Hazardous Materials Awareness

Upon graduation, he was assigned to Truck Company 7 located at 414 8th Street S.E. This member is qualified to operate the apparatus in the assigned position for his tour of duty however, he is not a Technician.[15]

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[14] Technicians are members who have participated in a promotional process and qualify to be designated as the driver for a specific apparatus for their shift. This is a monetarily compensated position.

This member was **initially** qualified to operate an apparatus on January 16, 2003.
They successfully passed the written and practical examination for Firefighter Technician given by the D.C. Fire and EMS Training Academy on May 12, 2009.

[15] This member was an alternate Tillerman and was qualified to operate the apparatus per D.C. Fire and EMS Order Book. The **initial** qualification to operate an apparatus was received by this member on November 27, 2004

Truck Company Officer's Training and Experience

Truck Company 7's Officer began his career on September 1, 1991. He was promoted to the rank of Captain in November of 2008. He was instructed in the following deliverables and graduated from the District of Columbia Fire and Emergency Medical Services Training Academy:

- Fire Fighter 1
- Fire Fighter 2
- Nationally Registered Emergency Medical Technician
- CPR
- Hazardous Materials Operations
- Hazardous Materials Awareness
- Fire Officer 1
- Fire Officer 2
- Fire Officer 3
- Fire Instructor 1
- Fire Instructor 2
- Incident Safety Officer
- Health and Safety Officer

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Cause of Injury/Medical History

The firefighter (Lineman) from Engine Company 3 sustained injuries as a result of contact made with Truck Company 7 simultaneous with being pinned between Truck Company 7 and Engine Company 3. The Lineman was facing Truck Company 7 at the time of impact, and side of the truck. The injuries were further exacerbated by his SCBA cylinder, which caused the Lineman to pivot as he was struck. The Lineman was briefly pinned between the truck and rear compartment of the engine for approximately 10-15 seconds until Truck Company 7 became aware of the incident and backed up enough to free him. Once he was free, members began immediate life-saving measures.

Members from Engine Company 3, Engine Company 6, and Truck Company 7 all immediately began emergency care that involved: airway management, assessment and rapid transport to the hospital. Members immediately removed all of his Personal Protective Equipment and work uniform and performed a rapid trauma assessment.

While this was being done, Ambulance 18 retrieved their equipment and began to transfer him onto their back-board and stretcher. While moving the injured firefighter from Engine Company 3 to Ambulance 18, Medic 3 arrived on the scene and he was placed in their unit.

The Lineman was ultimately transported by Medic 3, with members of Engine Company 3 and EMS 6 assisting. Due to the location of the incident, and the extent of the injuries to the Lineman, the decision was made to transport him to Medstar Hospital, and they were subsequently notified of the same via the hospital radio channel. The total time of transport (from injury occurrence until arrival at the hospital) was 14 minutes.

Once he arrived at Medstar, multiple physicians took over life-saving measures and were ultimately able to stabilize him.

The injuries the Lineman received were consistent with these types of accidents. All injuries were directly related to the initial and only impact between Truck Company 7, Engine Company 3 and Engine Company 3 Lineman.

The firefighter from Engine Company 3 underwent many surgeries and spent several weeks in the intensive care unit. He was moved to the National Rehabilitation facility where he underwent further rehab work. On October 25, 2017, the firefighter from Engine Company 3 was officially discharged from the hospital.

Personal Protective Equipment (PPE) Findings

The injured firefighter's Personal Protective Equipment (firefighting ensemble) was sent out to an independent 3rd party service provider for inspection after the incident. The gear sustained no damage and was not a contributing factor in the injuries sustained.

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SELF CONTAINED BREATHING APPARATUS (SCBA) FINDINGS

The injured firefighter's Self-Contained Breathing Apparatus (SCBA) that he was wearing at the time of the incident was inspected on the scene and was sent out to an independent 3rd party service provider for inspection after the incident.

The SCBA sustained level III damage (significant) to the exterior of the cylinder. The mask mounted regulator was separated due to the impact, and the metal back frame was distorted.

Although the member was wearing his SCBA at the time of his injury, the SCBA was not in use at the time of the incident and a malfunction of the SCBA **was not** a contributing factor in the injuries sustained.

The District of Columbia Fire and EMS Department currently operates using the (Scott Safety) Scott 4.5 Air-Pak 50 w/ Standard Harness/Standard Belt/Pak-Tracker.

The Firefighter was issued the Scott Safety AV-3000 HT face piece and was mated to his SCBA regulator.

This Self Contained Breathing Apparatus has been upgraded to the 2007 edition and is certified to meet NFPA 1981-2007 (Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services).

See Exhibit B for digital images.

Weather Conditions

At the approximate time of the incident, the weather was clear and the temperature was 76 degrees Fahrenheit. Visibility was clear and unobstructed in the area. Weather conditions were not a contributing factor in this incident.

See Exhibit C for digital images.

Incident Reconstruction

On September 10th 2017 at 0500 hours the members of the committee met with Detective Folts (MPD) at the scene of 8th and F St. N.E. The committee used pictures from the incident scene to recreate apparatus positioning and location of members at the scene. The following factors were observed:

- No member of Truck Company 7 was able to observe anyone operating along the officer's side of the truck.
- The area around the fifth wheel and outrigger controls has limited visibility for the Tillerman.
- Engine Company 3 was positioned away from the curb and in the intersection, impeding the ability of other apparatus to turn into the block.
- A collision between Truck Company 7 and Engine Company 3 was likely to have occurred regardless of members operating in this area if the trailer continued along its projected trajectory without the necessary adjustment being made to avoid contact
- The intersection was well-lit and provided no visual impairments.
- The Truck Driver from Truck Company 7 had limited visibility of the trailer and side of Engine Company 3.

Contributing Factors Specific to the Injured Firefighter

Based on the information gathered during the incident review process of 809 F St. N.E., the members of the Incident Review Committee were able to identify two contributing factors that resulted in the significant injury to the firefighter from Engine Company 3:

1. Situational Awareness during apparatus placement
2. Lack of fireground experience

Contributing Factor #1

Truck Company 7 struck the injured firefighter (Lineman) as they maneuvered the apparatus past a stationary Engine Company 3. The injured firefighter was standing at the rear of Engine Company 3 and was located in an area of reduced or limited visibility and was not observed by the Truck Driver and Tillerman.

The recreation of the scene of the incident highlighted the fact that apparatus placement proved to be a mitigating factor. Blind spots were identified that would require the need for spotters to ensure that the apparatus was operating in a safe manner.

The inability of the operators of the apparatus to forecast pinch points during maneuvers that offered diminished clearances as well as the less than productive placement of the apparatus on scene, created a scenario that offered very little margin for human error during fire ground activities. This lapse in situational awareness for the overall incident created an environment that fostered tunnel vision with regard to the immediate completion of the assigned task(s) at hand.

Contributing Factor #2

The lack of fireground experience for the injured firefighter (Lineman) was also determined to be a contributing factor as it relates to the member's ability to discern the appropriate fireground tactics and on scene safety. The lack of real time experiences and decision-making processes on an active fireground limited the firefighter's efforts to ensure personal safety concurrent with identification and mitigation of potential hazards on an incident.

Findings and Recommendations

The Incident Review Committee identified operational activities, performed by units responding to and on the fireground, which did not directly contribute to the significant injury but could possibly jeopardize our member's safety in the future if not abated.

These recommendations should be reviewed with corrections made to the Departments SOG's, fireground tactics and objectives in hopes of improving the safety, survival and performance for all members of the Department.

Finding #1

The initial box alarm being dispatched to an intersection without an exact address contributed to the likelihood that all units responding would arrive in the same vicinity simultaneously. This action is also a catalyst for the reorganization of unit assignments and positions which is problematic not only for the units concerned but also the Incident Commander who now has to re-direct company movements and assign tasks. Once a unit's position has been altered, the task that was originally designated has been reassigned and a new apparatus placement must be obtained. The change of one unit's positioning can reconfigure the entire response assignment.

Recommendation #1

Amend the current SOG for a response to a structure fire with an unknown address. The current procedure for dispatch should be changed and a new guideline created which will limit the number of units committed to the scene. This can be accomplished by providing that all units with the exception of the 1st due Engine Company and 1st due Truck Company stage 2 blocks away in line of approach. Additionally, based on the information obtained from the 911 caller, the response assignment with an unknown address can be reduced to a Local Alarm or less for an investigation. The response assignment can be upgraded once the exact address has been confirmed or additional information is received indicating a working incident.

Finding #2

Per D.C. Fire and EMS Standard Operating Guidelines, all responding engine companies assigned to a box alarm are either to establish or supplement a water supply.

As previously identified in Finding #1, on this incident, the initial response assignment was altered. Engine Company 18 was now responsible for establishing a water supply. Engine Company 18 did initiate this process by removing the humat valve and the attached hose but left the assembly in the middle of the street.

As a result of this action, Truck Company 7 was unable to enter the block to assume their assigned position. As they were entering the block, they were told to stop by the Wagon Driver from Engine Company 3. He subsequently removed the obstruction and motioned for Truck Company 7 to proceed into the block.

The inability of Truck Company 7 to turn into the block unimpeded due to the placement of the humat valve, the apparatus placement of Engine Company 3 and the direction of travel of Truck

Company 4 required that the current direction of travel be reassessed and an alternate means to enter the block located.

The obstruction in the road way prevented Truck Company 7 from moving into their assigned position without delay. This also impacted the decision-making process of the Wagon Driver from Engine Company 3 as he altered his apparatus position to ensure that Engine Company 18 had an adequate water supply.

Per the incident recreation, there was a hydrant located on the southeast corner of the 600 blk. of 8th St N.E. (also referenced as the 800 block of F Street N.E.) just a few feet from where the supply line was initially left in the intersection.

Recommendation #2

Develop, initiate and implement In Service Training deliverables which emphasize and reinforce the importance of apparatus positioning, situational awareness, and adherence to Department SOG's and training manuals. The training modules will provide additional clarity as to how to establish or supplement a water supply and the best practices for safe and efficient use of apparatus placement on incidents.

Finding #3

As previously identified in Findings #1 and #2, the initial dispatch for the response had been changed and a water supply needed to be established per Department SOG's. Engine Company 18 was now 1st due and had placed their supply line in the 800 block of F St N.E.

Engine Company 3 needed to secure a water supply and placed their apparatus on the southeast corner of the 800 blk. of F St. in order to accomplish this task. However, by doing so, their apparatus (along with the supply line and humat valve from Engine Company18) impeded the ability of other responding units to enter the block.

Pictures taken from the scene show that the apparatus placement Engine Company 3 selected for establishing water supply, reduced the clearance of that road way and impeded Truck Company 7 from entering the block without restriction (see attached photos).

Per the incident recreation, the identical hydrant which Engine Company 3 secured a water supply from (located on the southeast corner of the 800 blk. of F St. N.E.) could also have been used if the apparatus pulled further into the block and utilized their rear intake. The use of the rear intake from this position would have eliminated or reduced the impact of a diminished clearance for other units responding into the block. Additionally, the apparatus could have been placed closer to the curb and further up the street to prevent its rear from protruding into the intersection.

Recommendation #3

All D.C. Fire and EMS engines are designed with multiple intakes that aid in the establishment of a continuous water supply. Engine companies are tasked with ensuring that they can accomplish this assignment as efficiently as possible by selecting the proper hydrant and intake required for the task.

Develop, initiate and implement In Service Training deliverables which emphasize and reinforce the importance of apparatus positioning, situational awareness, and adherence to Department's SOG's and training manuals. The training modules will provide additional clarity as to how to establish or supplement a water supply and the best practices for safe and efficient use of apparatus placement on incidents.

Finding #4

Engine Company 3 and Truck Company 7 share several commonalities with regard to this incident. One of which is that the operators of these vehicles were not the regularly assigned drivers. Although all members are responsible for having the ability to operate an apparatus, there are members (Technicians) whose sole task is to operate their assigned apparatus on a daily basis.

Being a Technician carries with it a performance expectation as members who are assigned as such have been rigorously tested to a Department standard to achieve that promotion. They are considered to be experts at operating, responding, and placing their apparatus in the correct position at an incident.

It is impossible to ensure daily that there is a designated Technician operating on all Department apparatus as budget constraints, leave and training all influence that ability. However, it has been determined that the Tillerman of Truck Company 7, although on duty and assigned to the apparatus, was not assuming their normal responsibilities for that tour.

Conclusions from the investigation determine that it was the trailer portion of the apparatus which pinned the Lineman from Engine Company 3. The Tillerman from Truck Company 7 was performing the duties of the Truck Driver. Another firefighter from Truck Company 7 subsequently assumed the responsibilities of the Tillerman.

The ability to change assignments is within the discretion of the Officer in Charge and his/her comfort level with the members and their experience. There is no Department policy established which gives direction or instructions as to how this is to be handled.

Recommendation #4

Develop a written policy that identifies how to select fill in Technicians when the regular assigned Technician is not on duty. Regularly assigned Technicians should not be allowed to move away from defined positions on an apparatus in the absence of another member, unless extenuating circumstances exist. They should remain in their current position and another qualified driver be designated to fill the vacancy.

Develop, initiate and implement In Service training deliverables which emphasize and reinforce the importance of apparatus positioning situational awareness, and Emergency Vehicle Operation Course (EVOC). The training modules will provide additional clarity for safe and efficient use of apparatus placement on incidents.

Finding #5

Part of the Incident Review Committee's responsibility was to review all relevant data to include audio and video recordings that may have captured critical information needed to clarify the circumstances surrounding this significant event. Based on the results of the review, it was determined that the dash cameras that were installed on Truck Company 7 were not functional and/or operational and could not be reviewed for content. A more in-depth analysis revealed that the problem of inactive or unresponsive dash cameras is systemic within the Department and that the operational capability of the cameras is haphazard at best.

Recommendation #5

Ensure that all units in the Department are equipped with a functional dash camera that can be used to capture audio and video and extract data needed to complete a determination of the vehicle's speed, travel and occupant's activities during any investigative process.

These cameras should be properly maintained and the Department should ensure it has the necessary software to review and store this footage.

Finding #6

While conducting interviews from all members who may have responded or were on scene, it was determined that the use of the David Clark headsets was not consistent amongst **all** members assigned to the apparatus and responding to this incident. Communication between not only the operators of the apparatus but between all riding positions enhances the unit's situational awareness while responding. All members are able to work in concert to ensure that critical information is relayed efficiently and promptly.

Recommendation #6

Develop a policy that includes the use of a vehicle headset system for all riding position on an apparatus for which a David Clark headset has been provided. The headset system should be considered a critical safety item on all apparatus. On Tiller-Trucks, the buzzer system shall remain the primary method of communication between the Truck Driver and Tillerman, and all movement should be at the direction and acknowledgement of the buzzer system.

Finding #7

The location for initial assignment for the report of a fire was at 8th and F Street N.E. The updated size-up reported the corrected address to be simply 809. This was problematic in multiple ways.

First, it did not clarify the exact location of the structure on fire. Although the fire was at 809 F Street N.E., it was not unrealistic for the Incident Commander to think that the corrected address was 809 8th Street N.E. due to the initial dispatch to this intersection. Compounding matters, this hypothetical address (809 8th Street N.E.) was only blocks away from the intersection of 8th and F Street N.E.

Second, unit officers were giving an incomplete message when communicating critical incident information. These radio transmissions can leave some parts of the message open to interpretation or assumption, which is not appropriate for fireground activities.

Due to the complexity of the incident and the lack of clear radio transmissions, the Incident Command Post was not positioned in a manner that would allow them the ability to view at least 2 sides of the structure that was involved in firefighting activities.

Recommendation #7

This recommendation is twofold:

1. Ensure all members use clear communication (plain talk) in all aspects of an incident, and give complete and specific radio transmissions.

    a. This will minimize and or eliminate fireground miscommunication and improve overall radio traffic.
    b. The lack of clarity in radio transmissions was a determinant in
        i. Change of initial response assignment
        ii. Identification of the injured firefighter
    c. When the Office of Unified Communications (OUC) receives updated information on a response, they should immediately (verbally) relay that information to the responding Battalion Fire Chief.

2. Ensure the Incident Command Post (ICP) is located within a clear view of the incident.

    a. Based on the radio reports received, the ICP was located on 8th Street NE.
    b. Although the Incident Commander had some view from this vantage point, it was not the optimal position for monitoring tasks on the fireground.

Finding #8

The Incident Review Committee was formed days after the significant event had occurred. Although no formal policy had previously been developed to investigate incidents within this scope, on duty members did their best to gather as much critical information as they could in an effort to preserve the scene for a future investigation. Without having a documented plan of action, inevitably somethings were delayed and others dismissed. Apparatus involved in the incident were moved prior to the completion of the investigation, preventing a complete and thorough assessment of the scene.

Recommendation #8

This recommendation is as follows:

1. Create a standing Incident Review Committee that can be quickly activated to assist with the investigation of significant injuries, Line of Duty Deaths and serious accidents.
2. Develop a policy for a post major accident investigation.
3. Ensure that any units involved in a collision are not moved without the expressed permission of the Incident Commander and Safety Officer. Any unit involved in an accident en-route or on the scene of an emergency should immediately be considered "Out of Service" and have their assignment reallocated, unless otherwise directed by the Incident Commander.

    a. Create a major incident support unit Officer/Liaison – an individual who can assist the crew of an injured member – who could assist with logistical needs and transporting members that were directly involved in a critical incident.

Finding #9

Members interviewed regarding the significant event expressed that a revision of the Critical Incident Personnel Management (CIPM) Bulletin is warranted. Currently, D.C. Fire and EMS Bulletin 42 is outdated and member's contact information needs to be corrected and updated. Additionally, the process for the activation and the content of the information delivered should be standardized.

Recommendation #9

The following are recommendations that should be included in the revised Bulletin:

1. Members determined to be directly involved in an incident shall be immediately removed from duty and placed on Administrative Leave for the remainder of the tour. Members shall be required to meet with a mental health professional at the PFC prior to being placed back to full duty.

2. Add additional counselors and training to keep the content of information dispersed relevant to the subject audience.

3. Solicit applications for new counselors to increase the capability of the program.

4. When the need for CIPM has been identified, counselors are called in off-duty so they can focus solely on the needs of the incident. Members who are on-duty and are counselors should be used as a last resort.

5. Work in conjunction with IAFF Local 36, who has partnerships and resources with local area mental health professionals. Some members may be more comfortable dealing with counselors who are not associated with the agency.

Finding #10

It was not until late in the incident that the Incident Commander was aware that the injured person (that was reported on the fireground channel) was a firefighter. Multiple radio transmissions were made to alert the Incident Commander of this fact however, every radio report identified the injured person via a different nomenclature. This did not affect the treatment that was rendered to the injured firefighter but it did have an impact on the continuity of fireground operations and how the Incident Commander assigned tasks on the fireground.

Recommendation #10

Amend Communications Operations Bulletin No. 1 and the Standard Operating Guidelines to ensure that when members transmit a Priority, Mayday or "1033" message, that they transmit the message and wait to be acknowledged by the Incident Commander or OUC. For example, when members transmit a Priority message, they will transmit the following: "Engine 34 to Battalion 8 Priority". Stop and wait to be acknowledged, and then transmit their message, "Engine 34 Priority, we have an injured member at..." Members transmitting this type of message shall depress their Emergency Identifier button to give their radio priority in transmitting.

1. Additionally, all responding units shall monitor ongoing radio traffic. This includes responding Battalion Fire Chiefs and Aides as well as the Fire Liaison Officer (FLO) at the OUC when possible. Should any member hear an emergency radio transmission that is not readily acknowledged by the Incident Commander, they shall immediately ensure that this message is received.
2. Currently, the Department staffs one FLO on the OUC dispatch floor on any given shift. In order the ensure redundancy and that critical information is not missed, an additional FLO is needed to assist with:
    a. the monitoring of fireground channels
    b. relaying of critical incident related information
    c. providing updates and corrections
    d. support of the Incident Commander as needed

Finding #11

The individual interview process that was used to gather information regarding the significant event identified the following gap analysis. Members were not readily able to identify apparatus that had arrived on scene. The Incident Commander at this event reports significant difficulty identifying what units were positioned where, since many units were operating with reserve apparatus.

The needs of the Department dictate that as front-line apparatus is sent out for repairs, maintenance or service, a reserve piece of apparatus is used in its place. All apparatus have a unique identifier and serial number assigned to it and no two units are identical in that regard.

Several apparatuses assigned to the response at 809 F Street N.E. were temporarily assigned reserve apparatus. Being able to recognize responding units is paramount to the completion of assigned task as units normally work in tandem for efficiency and on scene safety.

Recommendation #11

Create a standardized placard system that allows companies using reserve apparatus the ability to designate that apparatus with their company identifiers. Any member or citizen should be able to recognize the correct unit operating the vehicle regardless of the apparatus' status in the fleet (front line or reserve).

Finding #12

A review of the fireground channels as well as interviews with members who actively responded revealed that this incident was very active and dynamic. There were many moving parts early in the response which seemed to cascade and eventually culminated with the injury to the firefighter.

As previously stated, none of the findings contained herein are directly related to the significant injury but training for low frequency, high acuity responses will result in a properly prepared workforce. One that is capable of recognizing and mitigating all hazards.

Recommendation #12

All members of the Department will benefit from additional training that will enhance fireground performance. The Department is implementing training at the company level but currently there is no active training for members serving as the Incident Commander.

Since the Incident Commander creates the objectives, strategies and tactics required to stabilize the incident, additional and continuing education and training to enhance their performance should be initiated.

Develop, initiate and implement In Service Training deliverables which emphasize and reinforce situational awareness, adherence to Department SOG's and training manuals and various aspects of incident management for operational chiefs.

DC Fire and EMS Department NFPA 1500 Compliance Table[16]

Chapter	Compliance	Planned Compliance Date
Chapter 1 Administration		
1.4 Equivalency		
1.4.1 Equivalency levels of qualifications established	Yes	
1.4.2 Training, education, competency, safety	Yes	
Chapter 2 Referred Publications		
Redacted		
Chapter 3 Definitions		
Redacted		
Chapter 4 Organization		
4.1 Fire Dept. Organization Statement		
4.1.1 Written statement or policy	Yes	
4.1.2 Operational response criteria/prepare & maintain SOPs/SOGs	Yes	
4.1.3 Statement available for inspection	Yes	
4.1.4 Pre-incident plan development	Yes	
4.2 Risk Management Plan		
4.2.1 Written risk management plan	Yes	
4.2.2 Risk management plan coverage	Yes	
4.2.3 Risk Management plan components	Yes	
4.3 Safety and Health Policy		
4.3.1 Written fire department occupational safety and health policy	Yes	
4.3.2 Program complies with NFPA 1500	Yes	
4.3.3 Plan effectiveness evaluated	Yes	
4.4 Roles and Responsibilities		
4.4.1 Fire department responsibility	Yes	
4.4.2 Comply with laws	Yes	
4.4.3 Fire department rules, regulations, SOPs and SOGs	Yes	
4.4.4 Accident investigation procedure	Yes	
4.4.5 Accidents and illness investigated	Yes	
4.4.6 Individuals cooperate, participate, and comply	Yes	
4.4.7 Member has right to be protected and participate	Yes	
4.4.8 Member organization role	Yes	
4.5 Occupational Safety and Health Committee		
4.5.1 Establish committee	Yes	
4.5.2 Committee purpose	Yes	

[16] The Compliance Table is based on the 2018 NFPA 1500 Standard. Any Index and sub-indices that were not deemed relevant to incident have been redacted or omitted.

4.5.3 Regular meetings	Yes	
4.5.4 Orientation process for best practices for safety committee processes	Yes	
4.6 Records		
4.6.1 Accidents, injury, illness, exposures, death records	Yes	
4.6.1.1 Data collection system established according to National Fire Service database	Yes	
4.6.2 Occupational exposures	Yes	
4.6.3 Confidential health records	Yes	
4.6.4 Training records	Yes	
4.6.5 Vehicles and equipment records	Yes	
4.7 Appointment of the Health and Safety Officer		
4.7.1 Appointed by Fire Chief	Yes	
4.7.2 Meets qualifications	Yes	
4.7.3 Given authority to administer program	Yes	
4.7.4 Performing functions in NFPA 1521	Yes	
4.7.5 Managing occupational safety and health program	Yes	
4.7.6 Additional safety officers and resources available	Yes	
Chapter 5 Training, Education, and Professional Development		
5.1 General Requirements		
5.1.1. Establish and maintain safety and health training	Yes	
5.1.2 Training commensurate with duties and functions	Yes	
5.1.3 Training and education programs for new members	Yes	
5.1.4 Restrict the activities of new members	Yes	
5.1.5 Training on the risk management plan	Yes	
5.1.6 Training on department's written procedures	Yes	
5.1.7 Training for emergency medical services	Yes	
5.1.8 Training on operation, limitation, maintenance, and retirement criteria for personal protective equipment	Yes	
5.1.9 Maintaining proficiency in skills and knowledge	Yes	
5.1.10 Training includes safe exiting and accountability	Yes	
5.1.11 Training includes incident management and accountability system used by the fire dept.	Yes	
5.2 Member Qualifications		
5.2.1 Fire fighters meet NFPA 1001	Yes	
5.2.2 Drivers/operators meet NFPA 1002	Yes	
5.2.3 Airport fire fighters meet NFPA 1003	Yes	
5.2.4 Fire officers meet NFPA 1021	Yes	
5.2.5 Wildland fire fighters meet NFPA 1051	N/A	
5.2.6 Hazardous materials responders trained to at least operations level per NFPA 472	Yes	

5.2.7 Fire investigation training meeting NFPA 1033	Yes	
5.2.8 Fire investigation training meeting NFPA 1031	Yes	
5.3 Training Requirements		
5.3.1 Adopt or develop training and education curriculum	Yes	
5.3.2 Training supports minimum qualifications and certifications of members	Yes	
5.3.2 Training supports minimum qualifications and certifications of members	Yes	
5.3.3 Members practice assigned skills sets on a regular basis but not less than annually.	Yes	
5.3.4 Training for members when written policies, practices, procedures, or guidelines are changed.	Yes	
5.3.5 SCBA training program per NFPA 1404	Yes	
5.3.6 Wildland fire fighters trained at least annually in the proper deployment of fire shelter	N/A	
5.3.7 Live fire training in accordance with NFPA 1403	Yes	
5.3.8 Supervised training	Yes	
5.3.9 Emergency medical services training	Yes	
5.3.10 Training on use, care, maintenance and limitation of PPE	Yes	
5.3.11 Training includes incident management and accountability system used by the fire department	Yes	
5.3.12 Infectious disease control training to NFPA 1581	Yes	
5.3.13 All members trained in the risk associated with the exposure to products on fireground and incident related health hazards	Yes	
5.4 Special Operations Training		
5.4.1 Advanced training for special operations	Yes	
5.4.2 Train members for support to special operations	Yes	
5.4.3 Technician level for hazardous materials mitigation	Yes	
5.4.4 Rescue technician training to NFPA 1006 when required	Yes	
5.5. Member Proficiency		
5.5.1 Proficiency of members	Yes	
5.5.2 Monitor training progress	Yes	
5.5.3 Annual skills check	Yes	
5.6 Training Activities		
5.6.1 All training done under supervision of qualified instructor	Yes	
5.6.2 All live training shall follow NFPA 1403	Yes	
5.6.2.1 EMS shall be on scene for live fire training as per NFPA 1403	Yes	
5.6.3 Non-fire training shall conduct a needs assessment to determine proper EMS presence	Yes	
Chapter 6 Fire Apparatus, Equipment and Drivers/Operators		
6.1 Fire Department Apparatus		
6.1.1 Safety and health concerns related to fire apparatus	Yes	

6.1.2 New fire apparatus meets NFPA 1901,	Yes	
6.1.3 New Wildland fire apparatus meets NFPA 1906	N/A	
6.1.4 New automotive ambulances meet NFPA 1917	Yes	
6.1.5 New marine firefighting vessels meet NFPA 1925	Yes	
6.1.6 Tools, equipment, and SCBA properly secured	Yes	
6.1.7 Apparatus refurbished per NFPA 1912	Yes	
6.1.8 Restraints and harnesses for aircraft operations	N/A	
6.1.9 Apparatus has storage area with positive means to present unintentional hose deployment	Yes	
6.2 Drivers/Operators of Fire Department Apparatus		
6.2.1 Successful completion of approved driver training	Yes	
6.2.2 Complies with traffic laws including having valid driver's licenses	Yes	
6.2.3 Rules and regulations for operating fire department vehicles	Yes	
6.2.4 Drivers are responsible	Yes	
6.2.5 All persons secured	Yes	
6.2.6 Drivers obey all traffic laws	Yes	
6.2.7 SOP's for nonemergency and emergency response	Yes	
6.2.8 Emergency response, drivers bring vehicle to a complete stop:	Yes	
6.2.9 Proceed only when safe	Yes	
6.2.10 Stop at unguarded railroad grade crossing	Yes	
6.2.11 Use caution at guarded railroad grade crossings	Yes	
6.2.12 SOP's engine, transmission and driveline retarders	Yes	
6.2.13 SOP's manual brake limiting valves	Yes	
6.2.14 Rules and regulations for private vehicles for emergency response	Yes	
6.3 Riding in Fire Apparatus		
6.3.1 Seated and belted securely while riding fire apparatus	Yes	
6.3.2 Tail steps and standing prohibited	Yes	
6.3.3 Seat belts not released while the vehicle is in motion	Yes	
6.3.4 Secured to vehicle while performing emergency medical care	Yes	
6.3.5 Hose loading operations	Yes	
6.3.6 Tiller training (if applicable)	Yes	
6.3.7 Helmets for riding in unclosed areas	Yes	
6.3.8 Eye protection for riding in unenclosed areas	Yes	
6.3.9 Alternative transportation	Yes	
6.4 Inspection, Maintenance, and Repair of Fire Apparatus		
6.4.1 Fire apparatus inspection, and repair per NFPA 1911	Yes	
6.4.2 Pumpers service tested per NFPA 1911	Yes	
6.4.3 Aerial ladders and elevating platforms tested per NFPA 1911	Yes	

6.4.4 Apparatus and equipment disinfected per NFPA 1581	Yes	
6.5 Tools and Equipment		
6.5.1 Safety and health are primary concerns	Yes	
6.5.2 Hearing conservation	Yes	
6.5.3 New fire department ground ladders meet NFPA 1931	Yes	
6.5.4 New fire hose meets NFPA 1961	Yes	
6.5.5 New spray nozzles meet NFPA 1964	Yes	
6.5.6 Equipment inspected at least weekly and within 24 hours after any use	Yes	
6.5.7 Records maintained for the equipment	Yes	
6.5.8 Tested at least annually	Yes	
6.5.9 Defective or unserviceable equipment removed from service	Yes	
6.5.10 Tools and equipment cleaned per NFPA 1581,	Yes	
6.5.11 Fire Department ground ladders tested per NFPA 1932	Yes	
6.5.12 Fire hose inspected and tested per NFPA 1962	Yes	
6.5.13 Portable fire extinguishers, tested and inspected per NFPA 10	Yes	
6.5.14 Powered rescue tools meet NFPA 1936	Yes	
Chapter 7 Protective Clothing and Protective Equipment		
7.1 General	Yes	
7.1.1 Fire department provides PPE	Yes	
7.1.2 Use of PPE	Yes	
7.1.3 Use of PPE specific to operation	Yes	
7.1.4 PPE cleaned every 6months per NFPA 1851	Yes	
7.1.5 Where worn, station work uniforms meet NFPA 1975	Yes	
7.1.7 Compliance training for a cleaning program for PPE	Yes	
7.2 Protective Clothing for Structural Fire Fighting		
7.2.1 Protective clothing meets NFPA 1971	Yes	
7.2.2 Minimum 2 in. (50 mm) overlap of all protective clothing layers	Yes	
7.2.3 Overlap not required on single piece protection coveralls	Yes	
7.2.4.2 Gloves have proper interface	Yes	
7.2.5.1 Program in place for selection, care, maintenance, and use of protective clothing	Yes	
7.2.6 Require all members to wear all appropriate protective ensemble	Yes	
7.3 Protective Clothing for Proximity Fire Fighting Operations		
7.3.1 Risk assessment performed as required by Chapter 5 of NFPA 1581 to determine need for proximity assembly	Yes	
7.3.2 Proximity firefighting protective equipment meeting NFPA 1971 provided and used	Yes	
7.3.3 Overlap not required on single piece protection coveralls	Yes	

7.3.4 SCBA protected	Yes	
7.4 Protective Clothing for Emergency Medical Operations		
7.4.1.1 Emergency medical protective clothing meeting NFPA 1999 provided and used,	Yes	
7.4.2 Members use emergency medical gloves	Yes	
7.4.3 Members use emergency medical body and face protection	Yes	
7.4.4 Infection control program for EMS protective clothing meets NFPA 1581	Yes	
7.5 Chemical Protective Clothing for Hazardous Material Emergency Operations		
7.5.1.1 Members have and use vapor protective garments that meet NFPA 1991 when appropriate	Yes	
7.5.2.1 Members have and use liquid splash protective garments that meet NFPA 1992 when appropriate	Yes	
7.5.3.1 Members have and use appropriate protective ensemble for CBRN terrorism incidents	Yes	
7.6 Inspection, Maintenance, and Disposal of Chemical Protective Clothing		
7.6.1 Inspected and maintained per manufacturer's recommendation	Yes	
7.6.2 Dispose of contaminated garments	Yes	
7.7 Protective Clothing and Equipment for Wildland Fire Fighting		
7.7.1 SOP's for use of protective clothing	N/A	
7.7.2 Protective clothing that meets NFPA 1977 provided and used	N/A	
7.7.3 Fire shelter provided and worn properly	N/A	
7.8 Protective Ensemble for Technical Rescue Operations		
7.8.1 Selection care and maintenance as provided in NFPA 1855	Yes	
7.8.2 Technical rescue protective clothing meeting NFPA 1951 provided and used	Yes	
7.8.3 Minimum 2 in (50 mm) overlap of all protective clothing layers	Yes	
7.8.4 Respiratory protection certified by NIOSH provided and used	Yes	
7.8.5 Primary eye protection that meets NFPA 1951 provided and used	Yes	
7.8.6 Protective clothing used and maintained per manufacturer's instructions	Yes	
7.9 Protective Clothing and Equipment for Surface Water Operations		
7.9.1 Members who engage in surface water operations use a protective ensemble meeting NFPA 1951	Yes	
7.9.2 Surface water protective ensembles used and maintained in accordance to manufacturer's instructions	Yes	
7.9.3 Fire department established maintenance and inspection program for surface water operation protective ensembles	Yes	
7.9.4 Proper decontamination procedures for surface water	Yes	

protective ensembles		
7.10 Respiratory Protection Program		
7.10.1 Respiratory protection program addresses the selection, care, maintenance, and use	Yes	
7.10.2 SOPs addresses respiratory protection	Yes	
7.10.3 Members qualified at least annually in use	Yes	
7.10.4 Reserve SCBA provided and maintained	Yes	
7.10.5 Adequate reserve air supply	Yes	
7.10.6 Equipment stored ready for use and properly protected	Yes	
7.10.7 SCBA provided that meets NFPA 1981 and required to be used	Yes	
7.10.8 Members understand keeping face piece in place	Yes	
7.10.9 Respiratory protection in the post fire environment	Yes	
7.11 Breathing Air		
7.11.1 Breathing air meets NFPA 1989	Yes	
7.12 Respiratory Protection Equipment		
7.12.1 SCBA meet appropriate standards	Yes	
7.12.2 Supplied air respirators appropriate for intended application	Yes	
7.12.3 Air purifying respirators NIOSH certified with policy for use	Yes	
7.13 Fit Testing		
7.13.1 Quantitative fit test annually	Yes	
7.13.2 New members fit tested before permitted in hazardous atmospheres	Yes	
7.13.3 Respirators quantitative fit testing in negative pressure mode	Yes	
7.13.4 Records of face piece fitting test	Yes	
7.13.5 Protection factor at least 500 for negative pressure face pieces	Yes	
7.14 Using Respiratory Protection		
7.14.1 Face piece to face seal required	Yes	
7.14.2 Nothing passes through area of seal	Yes	
7.14.3 No beard and facial hair in area of seal	Yes	
7.14.4 Spectacles fitted to inside of face piece	Yes	
7.14.5 Spectacle strap or temple bars prohibited	Yes	
7.14.6 Contact lenses permitted	Yes	
7.14.7 Head covering breaking seal prohibited	Yes	
7.14.8 SCBA face piece/head harness worn under protective hood	Yes	
7.14.9 SCBA face piece/head harness worn under hazardous materials chemical protective hood	Yes	
7.14.10 Helmet does not interfere with the face piece to face seal	Yes	
7.15 SCBA Cylinders		
7.15.1 Inspected annually	Yes	

7.15.2 Hydrostatic test cylinders	Yes	
7.15.3 SCBA cylinder minimum gas capacity	Yes	
7.15.4 In service SCBA cylinders stored charged	Yes	
7.15.5 In service SCBA cylinders inspected weekly, monthly, and prior to filling	Yes	
7.15.6 Personnel protected during SCBA cylinder filling	Yes	
7.15.7 Unique situations for rapid filling identified	Yes	
7.15.8 Risk assessment process used to identify rapid filling situations	Yes	
7.15.9 Rapid refilling of SCBA on person limited	Yes	
7.15.10 Emergency situation for air transfer permitted	Yes	
7.15.11 Trans filling per manufacturer's instructions	Yes	
7.15.12 Emergency strategy practiced when SCBA cylinder reaches less than 600 L	Yes	
7.16 Personal Alert Safety Systems (PASS)		
7.16.1 PASS meet NFPA 1982	Yes	
7.16.2 Members provided with and use PASS device	Yes	
7.16.3 Tested at least weekly and prior to use	Yes	
7.17 Life Safety Rope and System Components		
7.17.1 Life safety rope and system components meet NFPA 1983	Yes	
7.17.2 Life safety rope used for other purposes removed from service	Yes	
7.17.3 Reuse of life safety rope only after evaluation	Yes	
7.17.4 Rope inspection by qualified person	Yes	
7.17.5 Records document each life safety rope use	Yes	
7.18 Face and Eye Protection		
7.18.1 Eye protection appropriate for hazard provided and used	Yes	
7.18.2 SCBA face piece used as primary face and eye protection	Yes	
7.18.3 Primary eye protection used when full face piece not used	Yes	
7.19 Hearing Protection		
7.19.1 Provided and used when apparatus noise in excess of 90 dBA	Yes	
7.19.2 Provided and used when tool and equipment noise in excess of 90 dBA	Yes	
7.19.3 Hearing conservation program	Yes	
7.20 New and Existing Protective Clothing and Protective Equipment		
7.20.1 New PPE meets current standards	Yes	
7.20.2 Existing PPE shall have met standards when manufactured	Yes	
7.20.3 PPE retired in accordance with NFPA 1851	Yes	
7.20.4 Open Circuit SCBA retired in accordance with NFPA 1852	Yes	
7.20.5 Program for retirement and disposal of PPE	Yes	

7.20.6 Manufacturer criteria to be used	Yes	
Chapter 8 Emergency Operations		
8.1 Incident Management		
8.1.1 Prevent accidents and injuries	Yes	
8.1.2 Incident management system in writing and meets NFPA 1561	Yes	
8.1.3 IMS used at all emergency incidents	Yes	
8.1.4 IMS applied to drills, exercises, and training	Yes	
8.1.5 Incident commander responsible for safety	Yes	
8.1.6 Incident safety officer assigned when needed	Yes	
8.1.7 Span of Control	Yes	
8.1.8 Incident commander's responsibility	Yes	
8.2 Communications		
8.2.1 Dispatch and incident communication systems meet NFPA 1561 and NFPA 1221 8.2.2 SOPs	Yes	
8.2.2 Portable radios in warm or hot zones	Yes	
8.2.3 SOP's for use of clear text radio message	Yes	
8.2.4 Procedures for emergency traffic	Yes	
8.2.5 Incident clock used	Yes	
8.3 Risk Management During Emergency Operations		
8.3.1CRM function of Incident Commander	Yes	
8.4 Risk Management During Emergency Operations		
8.4.1 Risk management integrated in incident command	Yes	
8.4.2 Risk management principles used	Yes	
8.4.3 IC evaluates the risk to all members	Yes	
8.4.4 Risk management principle routinely used by supervisors	Yes	
8.4.5 Qualified Incident Safety Officer assigned	Yes	
8.4.6 Protective equipment appropriate for CBRN exposure	Yes	
8.5 Personnel Accountability During Emergency Operations		
8.5.1 Written SOPs for personnel accountability	Yes	
8.5.2 Local conditions and characteristics considered	Yes	
8.5.3 Members actively participate	Yes	
8.5.4 IC maintains awareness	Yes	
8.5.5 TLMC officers supervise assigned companies/crews	Yes	
8.5.6 Company officers responsible for members	Yes	
8.5.7 Members remain with company	Yes	
8.5.8 Member responsible for following personnel accountability system	Yes	
8.5.9 Personnel accountability system used at all incidents	Yes	
8.5.10 Accountability system effective	Yes	

8.5.11 Additional accountability officers	Yes	
8.5.12 IC and supervisors responsible for tracking and accountability of assigned companies	Yes	
8.6 Members Operating at Emergency Incidents		
8.6.1 Adequate number of personnel provided to safety conduct emergency operations	Yes	
8.6.2 No evolutions outside of established safety criteria	Yes	
8.6.3 Inexperienced members directly supervised	Yes	
8.6.4 Members operate in teams of two or more	Yes	
8.6.5 Crew members in communication with each other	Yes	
8.6.6 Crew members operate in proximity to each other	Yes	
8.6.7 Two in, two out in initial stages	Yes	
8.6.8 At aircraft rescue and firefighting IDLH area within 75 Ft (23 m) of aircraft	Yes	
8.6.9 Highest available level of EMS available for special operations	Yes	
8.6.10 EMS personnel at hazmat operations meet NFPA 473	Yes	
8.6.11 IC requests EMS to be available	Yes	
8.6.12 Members secured to aerial device	Yes	
8.6.13 PPE and SCBA used by fire investigators and others in IDLH atmosphere	Yes	
8.6.14 Water rescue members wear personal flotation devices	Yes	
8.6.15 SOP for hazardous energy source operation	YES	
8.7 Hazard Control Zones		
8.7.1 Hazard control zones established with members wearing appropriate level of PPE	Yes	
8.7.2 Hazard control zone perimeters established	Yes	
8.7.3 Changes in perimeters communicated to all members	Yes	
8.7.4 Hazard control zones identified	Yes	
8.7.5 The IC ensures that the designation of the appropriate protective clothing and equipment	Yes	
8.7.6 All officers and members using appropriate PPE	Yes	
8.7.7 The use of hazard control zones continued until the hazard have been mitigated	Yes	
8.8 Rapid Intervention for Rescue of Members		
8.8.1 Personnel provided for rescue of members	Yes	
8.8.2.2 Standby members maintain awareness	Yes	
8.8.2.3 Standby members remain in communication	Yes	
8.8.2.4 Standby member permitted to perform other duties outside of the hazard area	Yes	
8.8.2.5 Standby member restricted activities	Yes	
8.8.2.6 Standby members have full PPE and SCBA	Yes	
8.8.2.7 Standby members don full PPE and SCBA before entering	Yes	

hazardous area		
8.8.2.8 Standby member limitations	Yes	
8.8.2 Rapid intervention crew deployed when incident in no longer in initial stage	Yes	
8.8.2.10 In immediate life-threatening situations, action to prevent loss of life permitted with less than four personnel	Yes	
8.8.4 Rapid invention crew equipped and available	Yes	
8.8.6 Composure and structure or RIC flexible	Yes	
8.8.7 IC provides RIC's appropriate for incident size	Yes	
8.8.8 RIC status in early stages	Yes	
8.8.11 RIC's for special operations	Yes	
8.10 Violence, Civil Unrest, or Terrorism		
8.10.1 Fire department not involved in activity without law enforcement present	Yes	
8.10.2 Fire department personnel not involved in crowd control	Yes	
8.10.3 SOPs for member safety at civil disturbance	Yes	
8.10.4 Interagency agreement for protection of members	Yes	
8.10.5 Communication to indicate life and death situations	Yes	
8.10.6 Fire department to coordinate with law enforcement	Yes	
8.10.7 Fire department IC identifies and reacts to violent situations	Yes	
8.10.8 Fire department IC communicates with law enforcement IC	Yes	
8.10.9 Stage resources in a safe area until scene secure	Yes	
8.10.10 Secure law enforcement or withdraw when violence occurs	Yes	
8.10.11 Body armor used only by members trained and qualified	Yes	
8.10.12 Members supporting SWAT operations trained and operating under SOPs	Yes	
8.11 Post Incident Analysis		
8.11.1 SOPs for standardized post incident critique	Yes	
8.11.2 Incident safety officer involved in critique	Yes	
8.11.3 Review of conditions and actions on the safety and health of members.	Yes	
8.11.4 Identify needed action to improve welfare of members	Yes	
8.11.5 Analysis includes standard action plan	Yes	
8.11.5 Analysis includes standard action plan	Yes	
Chapter 9 Traffic Incident Management		
9.1 Reserved	N/A	
9.2 Emergency Operations at Traffic Incidents		
9.2.1 Training on Roadway Hazard and Safety for all members	Yes	
9.2.2 Develop SOG's in partnership with other agencies	Yes	
9.3 Placement of Apparatus and Warning Devices		
9.3.1 Safe zones established early	Yes	

9.4 Use of Apparatus as Blocking Device		
9.4.1 Proper placement of blocking apparatus	Yes	
9.4.2 Reduce warning lights when temporary TIMA established	Yes	
9.4.3 Additional units positioned downstream from blocking apparatus and warning lights reduced	Yes	
9.4.4 Ambulance placed in safe loading zone	Yes	
9.4.5 Traffic cones and warning signs compliant with MUTCD	Yes	
9.4.6 Proper utilization of warning lights	Yes	
9.4.7 Position units and victims in safe area	Yes	
9.4.8 Stage unneeded units downstream and off-road way	Yes	
9.4.9 Member shall wear high visibility safety equipment (ANSI 107) when potential for contact with motor vehicle traffic exist	Yes	
9.4.10 Train members to 1091 standard if assigned to traffic control	Yes	
Chapter 10 Facility Safety		
Redacted	N/A	
Chapter 11 Medical and Physical Requirements		
Chapter 11.1 Medical Requirements		
11.1.1 Medical qualified before becoming a member	Yes	
11.1.2 Medical evaluation considers risks and functions	Yes	
11.1.3 Candidates and members meet NFPA 1582	Yes	
11.1.4 Aircraft pilots comply with FAA regulations	N/A	
11.1.5 Members under influence of drugs or alcohol excluded from participation	Yes	
11.2 Physical Performance Requirements		
11.2.1 Fire department develops requirements	Yes	
11.2.2 Candidates qualified prior to training	NO	**In progress**
11.2.3 Members annually qualified	NO	**In progress**
11.2.4 Members not qualified not involved in emergency operations	Yes	
11.2.5 Physical performance rehabilitation program available	Yes	
11.3 Health and Fitness		
11.3.1 Health and fitness program meets NFPA 1583	NO	**In progress**
11.3.2 Fitness levels determined by individual's assigned functions	NO	**In progress**
11.3.3 Health and fitness coordinator administers the program	NO	**In progress**
11.3.4 Health and fitness coordinator acts as liaison	Yes	
11.4 Confidential Health Database		
11.4.1 Individual health file for each member	Yes	
11.4.2 Health file complete	Yes	
11.4.3 Composite data base for analysis	Yes	
11.4.4 Autopsy results in health data base	Yes	
11.5 Infection Control		

11.5.1 Fire department limits or prevents member's exposure	Yes	
11.5.2 Infection control program meets NFPA 1581	Yes	
11.6 Fire Department Physician		
11.6.1 Fire department licensed physician officially designated	Yes	
11.6.2 Provides medical guidance in management of safety and health program	Yes	
11.6.3 Physician licensed		
11.6.4 Available on urgent basis	Yes	
11.6.5 Health and Safety Officer and Health Fitness Coordinator liaison with physician	NO	**In progress**
11.7 Fitness for Duty Evaluations		
11.7.1 Process for evaluating essential job functions	Yes	
11.7.2 Evaluation by competent person and confirmed by fire department physician	Yes	
11.7.3 Treatment provided to allow member to perform essential job functions	Yes	
11.7.4 Fire department physician to determine member's return to work	Yes	
Chapter 12 Behavioral Health and Wellness Programs		
12.1 Behavioral Health Program		
12.1.1. Provide member assistance program	Yes	
12.1.2 Program refers members to appropriate health care services	Yes	
12.1.3 Program to assist members with coping with stressful events	Yes	
12.1.4 Program that supports behavioral health	Yes	
Chapter 13 Occupational Exposure to Atypically Stressful Events		
13.1 General		
13.1.1 Physician to provide guidance	Yes	
13.1.2 Written policy that establishes program to relieve stress	Yes	
13.1.3 Clearly outlined assistance and intervention to affected member	Yes	
Chapter 14 Exposure to Fireground Toxic Contaminants		
14.1 Training		
14.1 Training on hazards associated with fireground exposure	Yes	
14.2 Prevention and Mitigation	Yes	
14.3 Cleaning and Maintenance	Yes	
14.3.1 AHJ will provide for the cleaning and maintenance of PPE	Yes	
14.3.2 AHJ will remove all soiled and contaminated PPE from service until it is compliant with NFPA 1851	Yes	
14.4 Mitigation of Fireground Toxic Contamination Exposure	Yes	
14.4.1 Appropriate PPE shall be worn on fireground operations	Yes	
14.4.2 Respiratory protection during overhaul shall be a supplied air respirator	Yes	

14.4.2.1 APR Use in the Post Fire Environment	Yes	
14.4.2.1.1 APR with cartridge can be used in predetermined conditions and atmospheric levels	Yes	
14.4.2.1.2 The chemical cartridge must be NIOSH Approved	Yes	
14.4.2.1.3 The chemical cartridge should be replaced at regular intervals	Yes	
14.5 Post Incident Fireground Toxic Contamination Exposure	Yes	
14.5.1 Members trained in the proper doffing of contaminated PPE	Yes	
14.5.2 Create SOG for proper fireground decontamination	Yes	
14.5.3 AHJ shall provide decontamination facilities and equipment for exposed firefighters	Yes	
14.5.3.1 Proper post fireground hygiene for members	Yes	
14.6 Exposure Reporting Requirements	Yes	
14.6.1 Establish exposure reporting system	Yes	
14.6.1.1Exposure report records shall be maintained for 15 years	Yes	
14.6.1.2 Members shall access to their exposure report record	Yes	

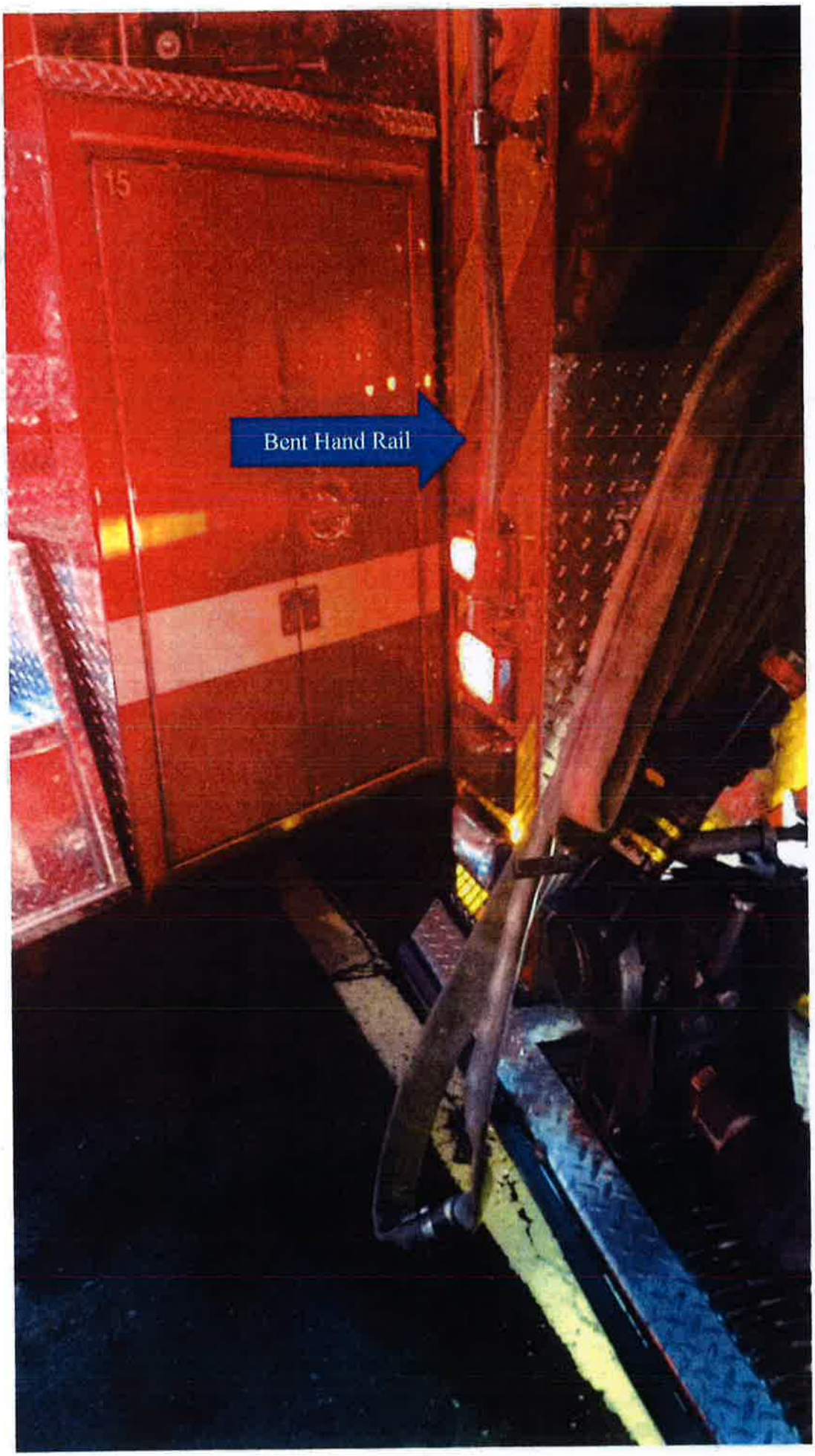
This Space is Intentionally Left Blank

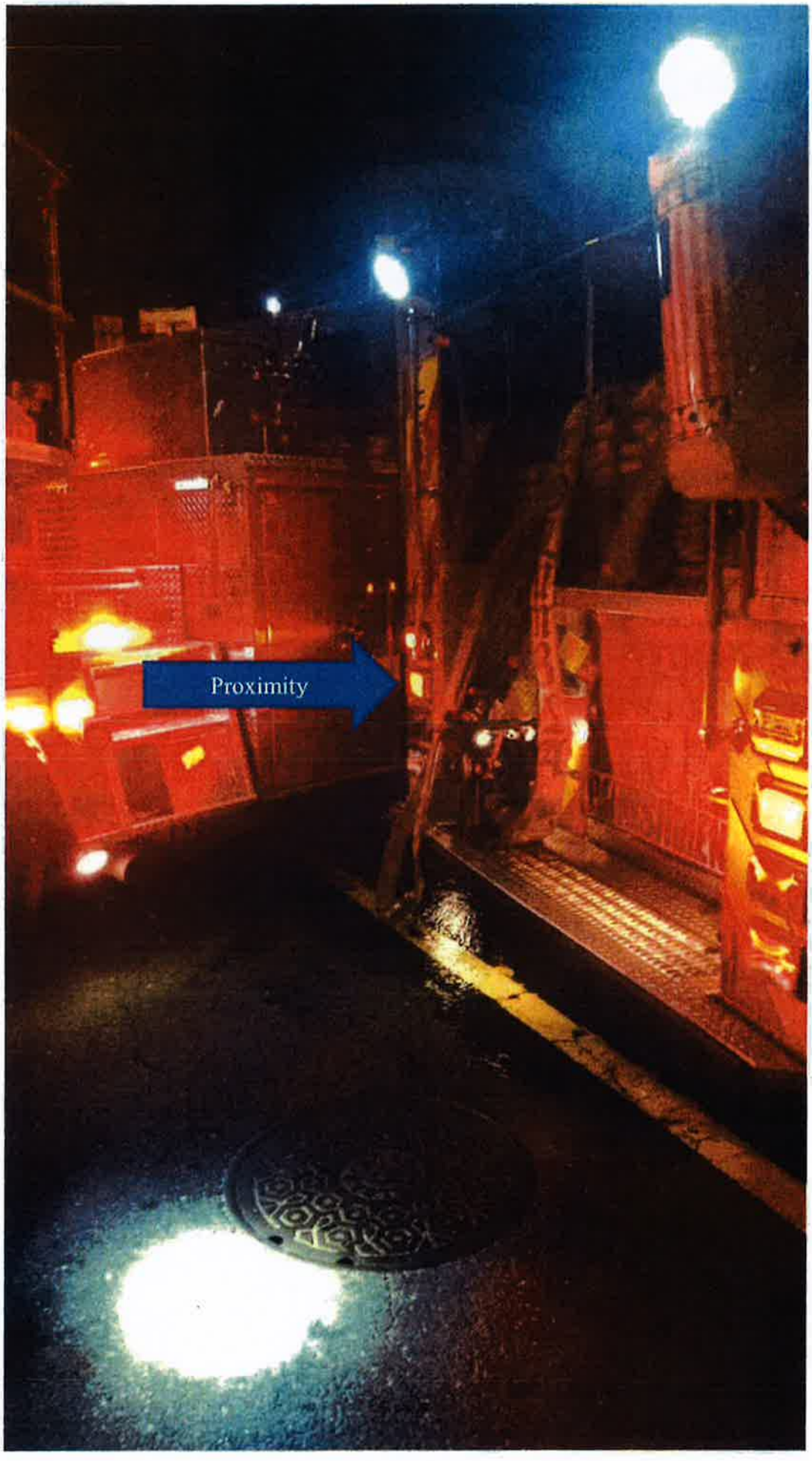
Exhibit A

SCBA

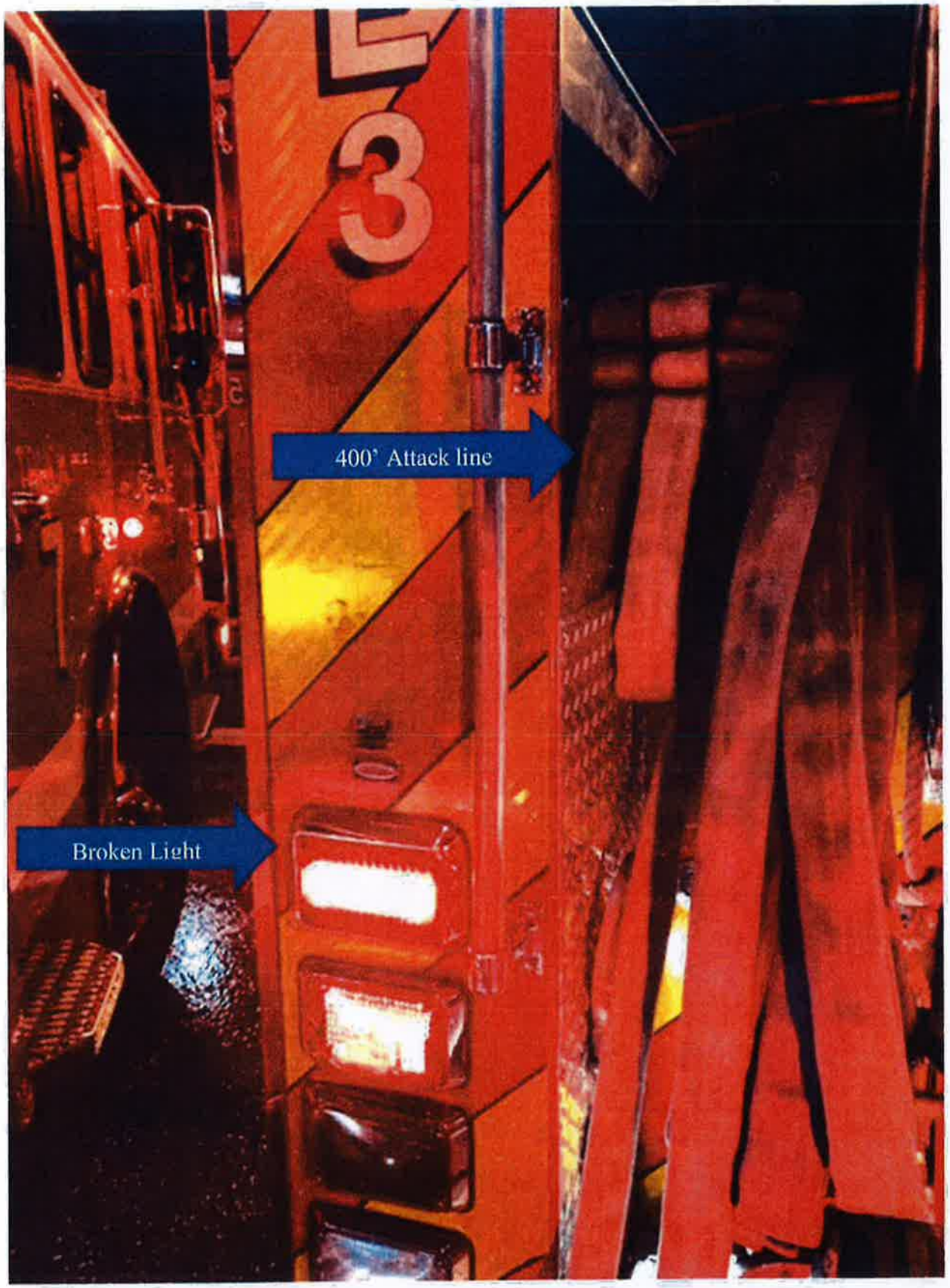

SCBA


Bent Hand Rail


Bent Hand Rail


Proximity


Apparatus Placement


3
400' Attack line
Broken Light

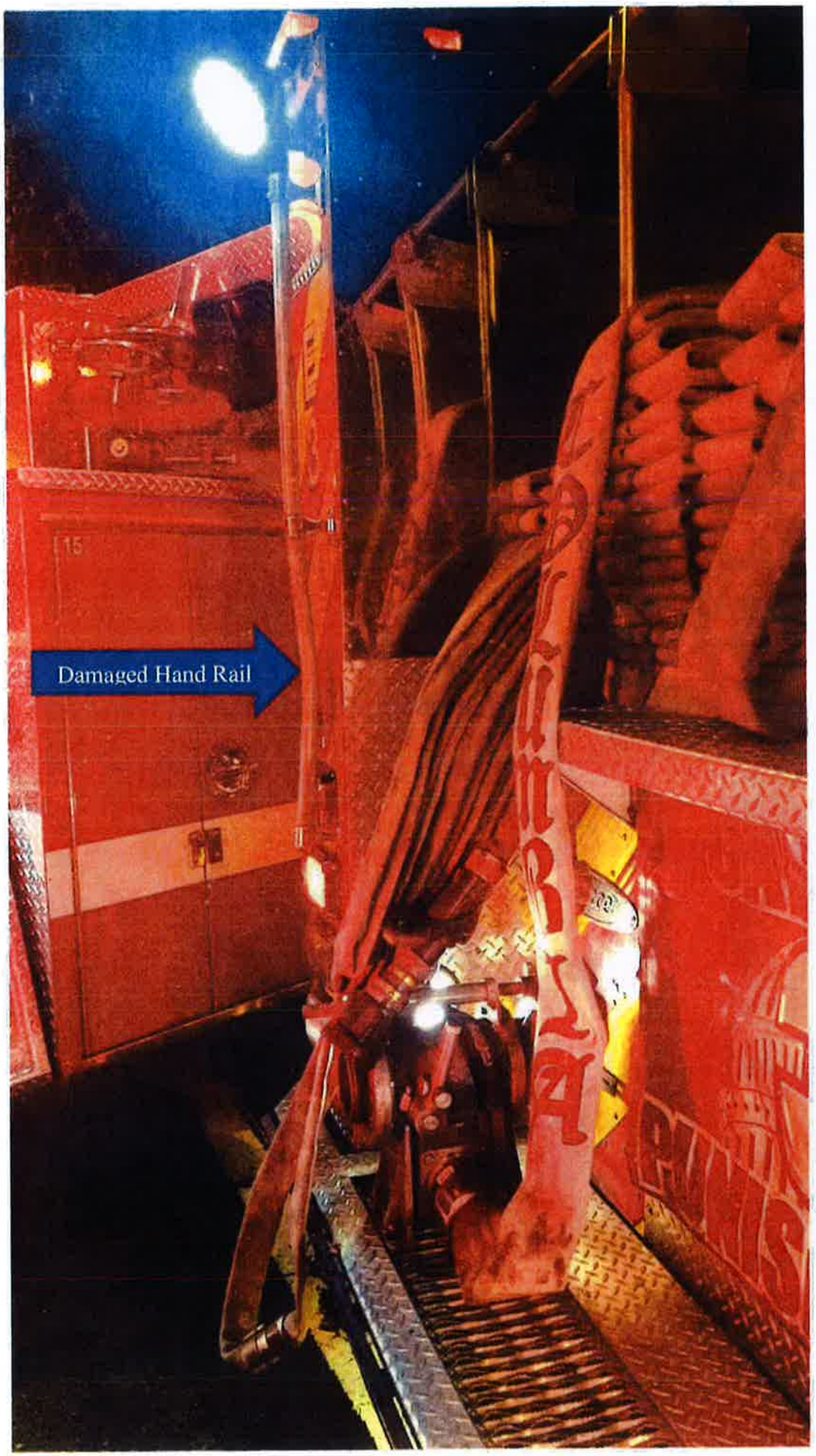
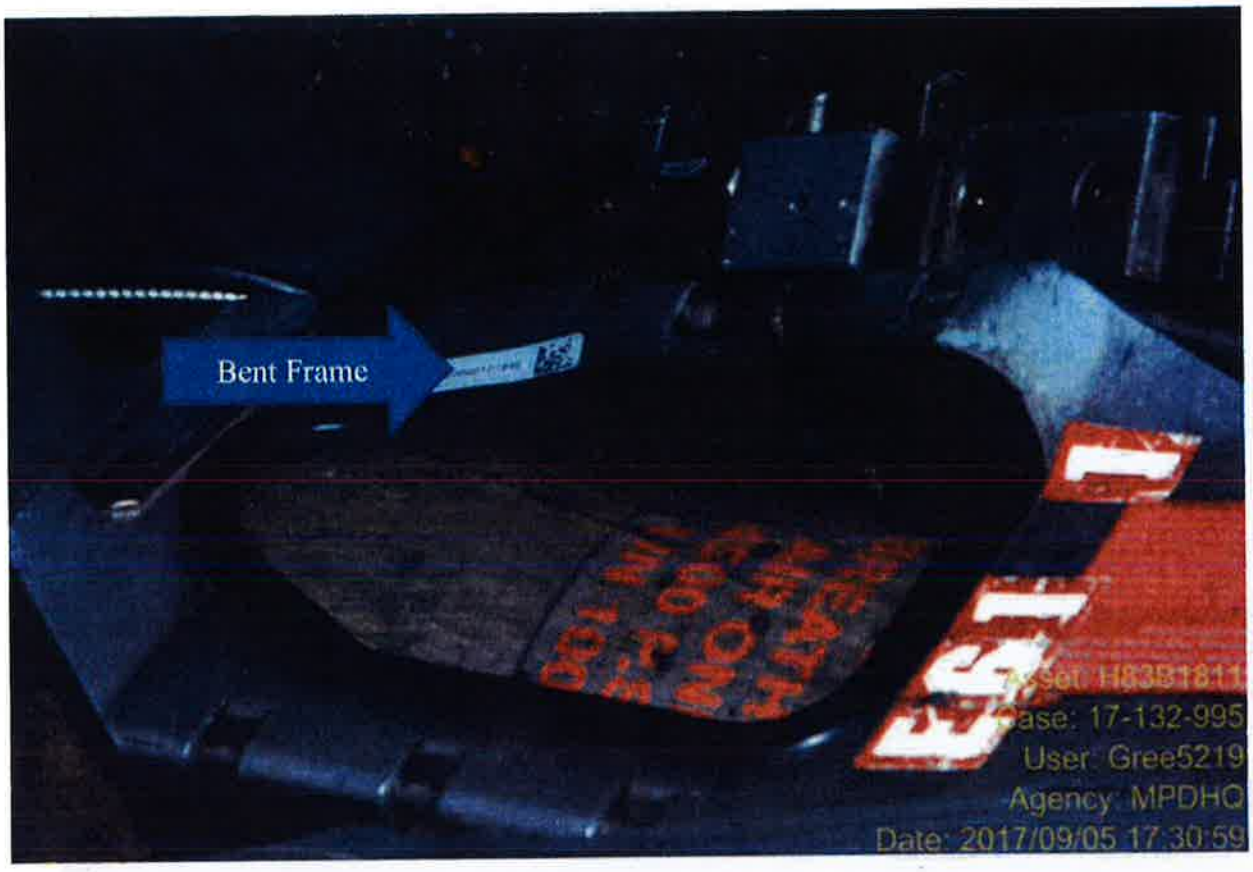

Damaged Hand Rail

Exhibit B


Damaged
Asset: H83B1816
Case: 17-132-995
User: Gree5219
Agency: MPDHQ
Date: 2017/09/05 17:32:22


Bent Frame
Asset: H83B1811
Case: 17-132-995
User: Gree5219
Agency: MPDHQ
Date: 2017/09/05 17:30:59

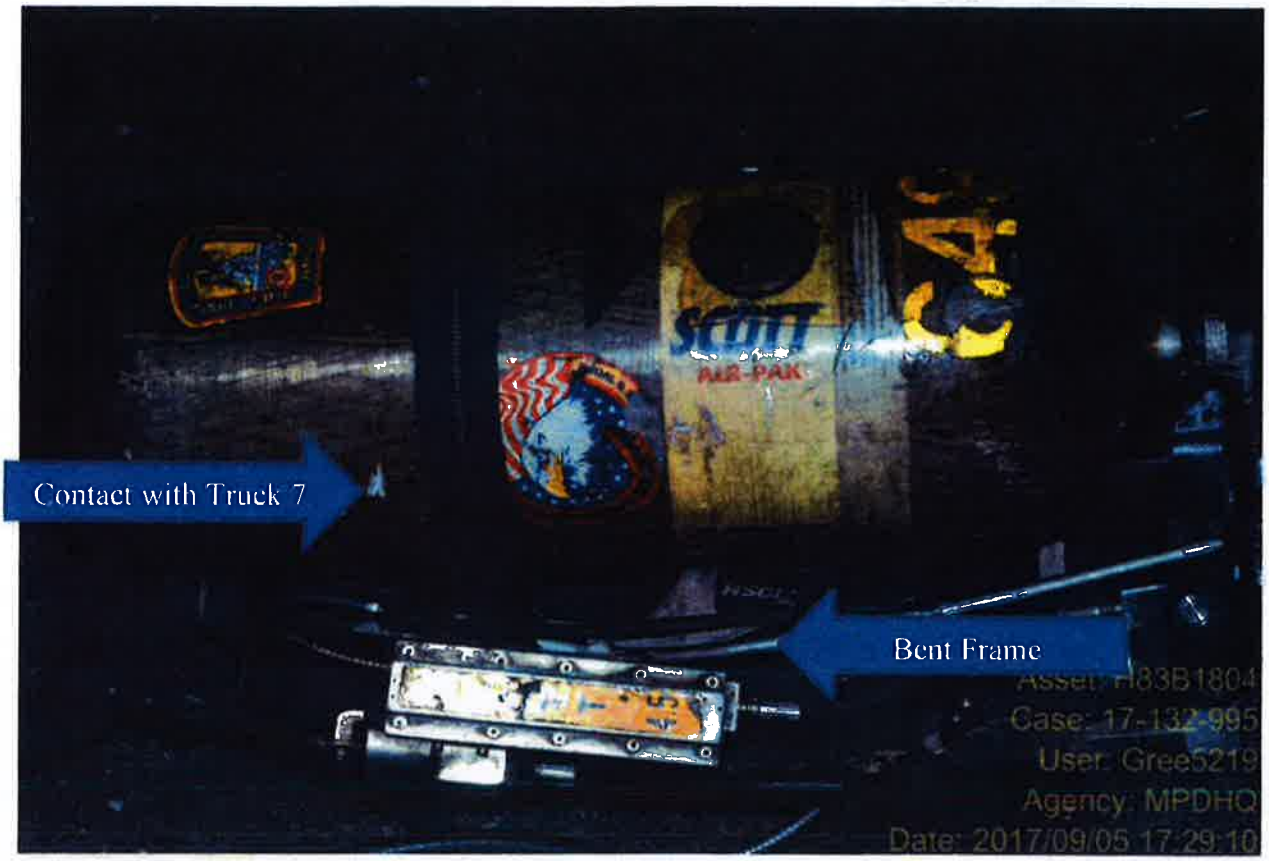

Contact with Truck 7
Bent Frame
SCOTT
AIR-PAK
Asset: H83B1804
Case: 17-132-995
User: Gree5219
Agency: MPDHQ
Date: 2017/09/05 17:29:10

Exhibit C

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service
Current Location: Elev 10 ft Lat 38.8472° N Lon -77.0345° W
Station: WASHINGTON REAGAN NATIONAL AIRPORT, VA US 13743

Local Climatological Data
Daily Summary
August 2017
Generated on 12/14/2017

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed - MPH			
																			Direction - Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	91	70	80	0.6	66	67	72	0	15	0509	1918	16	0.00	0.0	0	29.99	30.05	5.8	27	050	22	060
02	90	71	82	2.6	70	70	73	0	17	0510	1916		0.00	0.0	0	29.98	30.05	7.2	25	200	18	210
03	90	72	81	1.7	77	71	75	0	16	0511	1917	TS RA BR	0.06	0.0	0	30.01	30.07	5.8	26	340	23	320
04	90	74	82	2.8	71	71	74	0	17	0512	1916		0.00	0.0	0	29.90	29.96	10.6	24	150	18	180
05	81	71	76	-3.7	87	80	80	0	11	0513	1915		0.00	0.0	0	29.86	29.98	11.5	36	290	29	300
06	83	67	75	-4.1	60	60	66	0	10	0513	1914	RA	T	0.0	0	30.03	30.11	5.8	16	170	14	170
07	75	70	72	-7.0	92	70	71	0	7	0514	1913	RA DZ BR	1.47	0.0	0	29.82	29.87	8.7	25	050	17	030
08	81	70	76	-3.0	73	65	68	0	11	0515	1912	RA DZ BR	0.04	0.0	0	29.93	30.02	8.5	18	340	15	360
09	86	68	78	-2.0	58	59	66	0	13	0516	1911		0.00	0.0	0	30.11	30.20	4.5	16	140	14	140
10	83	67	75	-3.8	64	63	66	0	10	0517	1909		0.00	0.0	0	30.15	30.21	5.4	19	170	12	170
11	85	71	78	-0.8	70	66	71	0	13	0518	1908	TS RA BR	0.76	0.0	0	30.03	30.08	8.0	17	250	15	190
12	85	72	78	-0.7	68	73	74	0	13	0519	1907	TS RA BR	0.52	0.0	0	29.85	29.92	5.1	37	330	33	340
13	86	70	78	-0.6	67	65	69	0	13	0520	1906		0.00	0.0	0	29.90	29.98	6.7	20	300	18	300
14	80	71	76	-2.5	78	69	71	0	11	0521	1904		0.00	0.0	0	29.94	29.99	3.5	10	120	8	110
15	83	75	79	0.8	90	74	75	0	14	0522	1903	TS RA BR	0.17	0.0	0	29.83	29.91	3.5	18	330	03	330
16	91	72	82	3.7	74	72	75	0	17	0522	1902	BR	0.00	0.0	0	29.91	29.99	4.6	17	310	04	340
17	89	76	82	3.6	81	75	77	0	17	0523	1900		0.00	0.0	0	29.91	29.97	5.6	27	180	22	180
18	91	76	84	5.9	66	77	79	0	19	0524	1859	TS RA BR	0.51	0.0	0	29.78	29.84	8.8	33	260	28	260
19	91	73	82	4.0	64	69	73	0	17	0525	1858	HA TS	0.01	0.0	0	29.83	29.91	7.9	25	310	21	350
20	86	70	78	1.1	61	64	69	0	14	0526	1856		0.00	0.0	0	29.83	30.11	8.4	17	340	15	350
21	90	75	82	4.3	82	74	76	0	17	0527	1855	TS RA	0.01	0.0	0	30.09	30.16	7.4	25	170	22	170
22	92*	75	84	6.4	75	74	77	0	19	0528	1854		0.00	0.0	0	29.91	29.94	11.3	28	210	24	200
23	86	73	80	2.5	81	65	70	0	15	0529	1852		0.02	0.0	0	29.79	29.86	8.0	29	340	26	340
24	84	71	78	0.7	54	58	65	0	13	0530	1851		0.00	0.0	0	29.88	29.96	8.8	19	050	16	030
25	81	69	75	-1.1	66	60	65	0	8	0531	1849	RA	0.05	0.0	0	30.04	30.13	5.6	19	350	15	350
26	81	66	73	-4.0	62	58	65	0	8	0531	1848		0.00	0.0	0	30.15	30.23	6.3	18	070	17	080
27	79	66	72	-4.8	62	56	64	0	7	0532	1846		0.00	0.0	0	30.14	30.22	7.6	18	080	15	070
28	78	64	71	-5.6	65	58	63	0	6	0533	1845		0.00	0.0	0	30.14	30.20	10.8	23	120	20	100
29	83	65	67	-9.4	93	64	65	0	2	0534	1843	RA DZ BR	0.94	0.0	0	30.04	30.06	11.6	22	010	17	010
30	79	64*	72	-4.2	73	61	65	0	5	0535	1842		0.00	0.0	0	30.06	30.02	6.3	17	330	13	330
31	86	68	77	1.0	69	64	68	0	12	0536	1840		0.00	0.0	0	29.91	29.98	8.2	25	020	22	020
	84.6	70.2	77.4									Monthly Averages | Totals	4.59			29.96	30.04	7.3				
	4.9	0.9	2.7									Departure from Normal (1981-2010)	1.65									

Degree Days	Monthly		Season-to-date		Temperature				Number of days with...				
					Max		Min		Precipitation		Snow	Weather	
	Total	Departure	Total	Departure	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating	0	0	0										
Cooling	385	21	1461		9	0	0	0	11	5	0		

Date of 5-sec to 3-sec wind equipment change	Sea Level Pressure				Greatest...			
			Date	Time	24-Hr...		Snow Depth
2006 09 26	Maximum	30.26	27	1019	Precip	Snowfall	
	Minimum	29.73	18	1649	1.47	0.0	0
					Date		
					07 07		

Station Augmentation
Name: AA CWO Lat: N/A Lon: N/A Elevation: N/A Distance: 25 nm NW Elements: TEMP PRECIP SNOW Equipment: PSY SRG SNOWBOARD

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service
Current Location: Elev 18 ft, Lat 38.8472° N, Lon -77.0345° W
Station: WASHINGTON REAGAN NATIONAL AIRPORT, VA US 13743

Local Climatological Data
Hourly Observations
August 2017

Generated on: 12/14/2017

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Day	Time (LST)	Station Type	Sky Conditions	Visibility	Weather Type (see documentation) AU | AW | MW	Dry Bulb Temp (F)	Dry Bulb Temp (C)	Wet Bulb Temp (F)	Wet Bulb Temp (C)	Dew Point Temp (F)	Dew Point Temp (C)	Rel Hum %	Wind Speed (MPH)	Wind Dir (Deg)	Wind Gusts (MPH)	Station Press (inHg)	Press Tend	Met 3-Hr Change (inHg)	Sea Level Press. (inHg)	Report Type	Precip Total (in)	Altimeter Setting (inHg)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
02	0052	7	BKN 07 100 OVC 08 250	10.00		77	25.0	72	22.1	69	20.6	77	5	180		29.98	8	+0.01	30.05	FM-15	0.00	30.05
02	0100	4		9.94		77	25.0	72	22.1	69	20.6	77	5	180		29.98	8	+0.01	30.05	FM-12		
02	0152	7	FEW 02 110 BKN 07 130 BKN 07 250	10.00		76	24.4	73	22.6	71	21.7	85	6	180		29.98			30.04	FM-15	0.00	30.05
02	0252	7	BKN 07 130 OVC 08 250	10.00		78	25.4	72	22.2	70	21.1	82	3	210		29.98			30.05	FM-15	0.00	30.05
02	0352	7	BKN 07 130 OVC 08 250	10.00		76	24.4	73	22.6	71	21.7	85	0	000		29.97	8	+0.01	30.04	FM-15	0.00	30.04
02	0400	4		9.94		76	24.4	73	22.6	71	21.7	85	0	000		29.98	8	+0.01	30.04	FM-12		
02	0452	7	FEW 02 120 SCT 04 150 BKN 07 250	10.00		74	23.3	72	22.2	71	21.7	91	5	190		29.98			30.05	FM-15	0.00	30.05
02	0552	7	FEW 02 150 BKN 07 250	10.00		74	23.3	71	21.6	70	21.1	88	5	220		29.99			30.06	FM-15	0.00	30.06
02	0652	7	FEW 02 170 BKN 07 250	10.00		76	24.4	73	22.6	71	21.7	85	6	210		30.01	3	-0.04	30.07	FM-15	0.00	30.08
02	0700	4		9.94		76	24.4	73	22.6	71	21.7	85	5	210		30.01	3	-0.04	30.07	FM-12		
02	0752	7	FEW 02 170 BKN 07 250	10.00		77	25.0	73	22.8	71	21.7	82	5	140		30.01			30.07	FM-15	0.00	30.08
02	0852	7	FEW 02 160 SCT 04 250	10.00		81	27.2	75	23.8	72	22.2	74	0	000		30.00			30.07	FM-15	0.00	30.07
02	0952	7	FEW 02 160 SCT 04 250	10.00		83	28.3	75	23.8	71	21.7	67	7	170		30.00	7	+0.00	30.07	FM-15	0.00	30.07
02	1000	4		9.94		83	28.3	75	23.8	71	21.7	67	7	170		30.01	4	0.00	30.07	FM-12		
02	1052	7	FEW 02 50 FEW 02 160 SCT 04 250	10.00		85	29.4	75	23.8	70	21.1	61	10	170		30.00			30.07	FM-15	0.00	30.07
02	1152	7	FEW 02 55 FEW 02 170 SCT 04 250	10.00		87	30.6	74	23.1	67	19.4	51	14	170		29.99			30.06	FM-15	0.00	30.06
02	1252	7	SCT 04 60 SCT 04 250	10.00		88	31.1	77	24.9	72	22.2	59	10	170		29.98	8	+0.02	30.05	FM-15	0.00	30.05
02	1300	4	67	9.94		88	31.1	77	24.9	72	22.2	59	10	170		29.98	8	+0.02	30.05	FM-12		
02	1352	7	SCT 04 55 SCT 04 250	10.00		88	31.1	76	24.0	71	21.7	57	10	180		29.96			30.03	FM-15	0.00	30.03
02	1452	7	BKN 07 50 BKN 07 250	10.00		90	32.2	76	24.2	69	20.6	50	15	190	21	29.93			30.00	FM-15	0.00	30.00
02	1552	7	BKN 07 55 BKN 07 75 BKN 07 250	10.00		89	31.7	74	23.1	66	18.9	47	14	220	25	29.93	5	+0.05	30.00	FM-15	0.00	30.00
02	1600	4	67	9.94		89	31.7	74	23.1	66	18.9	47	14	220		29.93	5	+0.05	30.00	FM-12		
02	1652	7	FEW 02 55 SCT 04 75 BKN 07 250	10.00		87	30.6	73	22.8	66	18.9	50	10	220		29.93			30.00	FM-15	0.00	30.00
02	1752	7	FEW 02 60 SCT 04 80 BKN 07 250	10.00		86	30.0	72	22.3	65	18.5	49	13	220		29.94			30.01	FM-15	0.00	30.01
02	1852	7	SCT 04 60 SCT 04 90 BKN 07 250	10.00		80	26.7	72	22.2	68	20.0	67	9	090		29.96	3	-0.02	30.02	FM-15	0.00	30.03
02	1900	4	67	9.94		80	26.7	72	22.2	68	20.0	67	9	090		29.96	3	-0.02	30.02	FM-12		
02	1952	7	FEW 02 65 SCT 04 100 BKN 07 250	10.00		79	26.1	72	22.1	68	20.0	60	5	080		29.98			30.05	FM-15	0.00	30.05
02	2052	7	BKN 07 75 BKN 07 90 BKN 07 250	10.00		78	25.6	72	22.2	69	20.6	74	5	090		30.00			30.06	FM-15	0.00	30.07
02	2152	7	FEW 02 75 SCT 04 90 BKN 07 250	10.00		78	25.6	73	22.6	70	21.1	76	0	000		30.01	1	-0.05	30.07	FM-15	0.00	30.08
02	2200	4	74	9.94		78	25.6	73	22.6	70	21.1	76	0	000		30.01	1	-0.05	30.07	FM-12		
02	2252	7	FEW 02 80 BKN 07 250	10.00		77	25.0	73	22.8	71	21.7	82	7	140		30.01			30.08	FM-15	0.00	30.08
02	2352	7	FEW 02 80 SCT 04 65 SCT 04 250	10.00		76	24.4	73	22.6	71	21.7	88	6	140		30.01			30.08	FM-15	0.00	30.08
03	0052	7	FEW 02 80	10.00		76	24.4	73	22.6	70	21.1	84	7	160		30.00	4	+0.00	30.07	FM-15	0.00	30.07
03	0100	4	74	9.94		75	23.9	73	22.6	70	21.1	84	7	160		30.01	4	+0.00	30.07	FM-12		
03	0152	7	FEW 02 80	10.00		75	23.9	72	22.2	70	21.1	84	3	160		30.00			30.07	FM-15	0.00	30.07
03	0252	7	FEW 02 70	10.00		75	23.9	72	22.2	70	21.1	84	6	070		30.00			30.06	FM-15	0.00	30.07
03	0352	7	CLR 00	10.00		73	22.8	70	21.3	69	20.6	87	6	040		29.99	6	+0.01	30.06	FM-15	0.00	30.06
03	0400	4		9.94		73	22.8	70	21.3	69	20.6	87	6	040		29.99	6	+0.01	30.06	FM-12		
03	0452	7	FEW 02 80 FEW 02 240	10.00		73	22.8	70	21.3	69	20.6	87	8	050		30.00			30.07	FM-15	0.00	30.07
03	0552	7	FEW 02 240	10.00		73	22.8	70	21.3	69	20.6	87	6	060		30.02			30.09	FM-15	0.00	30.09
03	0652	7	FEW 02 230	10.00		74	23.3	71	21.9	70	21.1	88	3	060		30.04	3	-0.03	30.11	FM-15	0.00	30.11
03	0700	4		9.94		74	23.3	71	21.9	70	21.1	88	3	060		30.04	3	-0.03	30.11	FM-12		
03	0752	7	FEW 02 110 FEW 02 250	10.00		77	25.0	73	22.8	71	21.7	82	5	020		30.05			30.12	FM-15	0.00	30.12
03	0852	7	FEW 02 160 SCT 04 210	10.00		80	26.7	74	23.3	71	21.7	74	0	000		30.05			30.12	FM-15	0.00	30.12
03	0952	7	BKN 07 160 BKN 07 250	10.00		84	28.9	76	24.3	72	22.2	67	3	360		30.05	1	-0.02	30.12	FM-15	0.00	30.12
03	1000	4		9.94		84	28.9	76	24.3	72	22.2	67	3	360		30.06	1	-0.02	30.12	FM-12		
03	1052	7	FEW 02 60 SCT 04 170	10.00		88	30.0	76	24.3	71	21.7	61	3	030		30.05			30.12	FM-15	0.00	30.12
03	1152	7	SCT 04 50 SCT 04 170	10.00		87	30.6	76	24.4	71	21.7	59	0	000		30.03			30.10	FM-15	0.00	30.10
03	1252	7	SCT 04 60 SCT 04 250	10.00		88	31.1	76	24.7	70	21.1	55	6	190		30.01	8	+0.04	30.08	FM-15	0.00	30.08
03	1300	4	67	9.94		88	31.1	76	24.7	70	21.1	55	6	190		30.01	8	+0.04	30.08	FM-12		
03	1352	7	SCT 04 60 SCT 04 250	10.00		89	31.7	76	24.4	70	21.1	53	9	170		29.99			30.06	FM-15	0.00	30.06
03	1452	7	SCT 04 60 BKN 07 250	10.00		89	31.7	76	24.7	71	21.7	55	11	180		29.96			30.03	FM-15	0.00	30.03
03	1552	7	SCT 04 50 SCT 04 100 BKN 07 250	10.00		88	31.1	77	25.2	73	22.8	61	13	170		29.96	6	+0.05	30.03	FM-15	0.00	30.03
03	1600	4	67	9.94		88	31.1	77	25.2	73	22.8	61	13	170		29.96	6	+0.05	30.03	FM-12		
03	1652	7	SCT 04 49 SCT 04 100 BKN 07 250	10.00		87	30.6	77	25.1	73	22.8	63	9	170		29.95			30.02	FM-15	0.00	30.02
03	1740	7	BKN 07 50 BKN 07 100 OVC 08 250	5.00	RA | RA |	80	26.7	75	23.6	72	22.2	76	15	100		29.98				FM-16	1	30.05
03	1745	7	BKN 07 50 BKN 07 100 OVC 08 250	5.00	RA | RA TS | S |	77	25.0	74	23.1	72	22.2	85	20	310		29.99				FM-16	0.01	30.06
03	1752	7	FEW 02 20 BKN 07 41 BKN 07 100	9.00	TS |	73	22.8	70	21.0	68	20.0	84	17	340	28	29.99			30.06	FM-15	0.03	30.06
03	1804	6	SCT 04 43 BKN 07 100	4.00	TS |	73	22.8	70	21.0	69	20.6	87	15	030		29.98				FM-16	0.03	30.05