UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	*
	*
NATURAL GAS DISTRIBUTION PIPELINE	*
LEAK AND MULTISTORY STRUCTURE	* Docket No.: DCA-14-MP-002
EXPLOSION IN HARLEM, NEW YORK	*
MARCH 12, 2014	*
	*

Interview of: ROBERT CANNELI

Office of Emergency Management
165 Cadman Plaza
Brooklyn, New York

Tuesday,
September 30, 2014

The above-captioned matter convened, pursuant to notice.

BEFORE: RAVI CHHATRE
Investigator-in-Charge

APPEARANCES:

RAVI CHHATRE, Investigator-in-Charge
National Transportation Safety Board
Washington, D.C.

LEON HEYWARD, Deputy Commissioner
New York City Department of Transportation

CHRIS STOLICKY, Utility Supervisor (Safety)
New York State Department of Public Service
(Party Representative)

FRANK McCARTON, Deputy Commissioner
Office of Emergency Management
New York, New York
(Party Representative)

KALU KELLY EMEABA, Accident Investigator
National Transportation Safety Board

SONJA ORGIAS, Assistant Counsel
Bureau of Legal Affairs of New York City
Fire Department
(On behalf of Mr. Gells)

LEONARD SINGH, Chief Engineer
Gas Distribution Services
Con Edison
(Party Representative)

I N D E X

I N T E R V I E W

MR. CHHATRE: On the record. Good afternoon. Today is Tuesday, September 30, 2014. We are currently in New York City's Office of Emergency Management Facility located at 165 Cadman Plaza, Brooklyn, New York. We are meeting regarding the investigation of natural gas distribution pipeline leak and multistory structure explosion that occurred on March 12, 2014 in Harlem, New York.

My name is Ravi Chhatre. I am with National Transportation Safety Board located in Washington, D.C. and I am investigator in charge of this accident. The NTSB investigation number for this accident is DCA-14-MP-002.

I would like to start by notifying everyone present in this room that we are recording this interview and we may transcribe it at a later date. Transcripts will be provided directly to the interviewee for review and identifying any typographical errors. The transcript may be posted in NTSB's public docket.

Also, I'd like to inform Mr. Canneli that you are permitted to have one other person present with you during the interview. This is a person of your choice, your supervisor, friend, family member or, if you choose, no one at all. Please state for the record your full name, spelling of your name, organization you work for, your title, business contact information, such as mailing address, email address, and whom you

have chosen to be with you during your interview.

MR. CANNELI: My name is Robert Gerard Canneli. I work for the fire department in New York City. I'm stationed in Harlem, New York at Engine Company 58. My contact information, the firehouse is area code [redacted]. I've chosen Ms. Orgias to counsel me at this meeting.

MR. CHHATRE: Okay. Now I'd like to go around the room and have each person introduce themselves. Please state your name, spelling of your name, your title and the organization that you represent and your business contact information, starting from my left.

MR. HEYWARD: Leon Heyward, H-e-y-w-a-r-d, Deputy Commissioner, New York City Department of Transportation. Phone number, 212-839-4300. Email address [redacted].

MR. STOLICKY: Christopher Stolicky, S-t-o-l-i-c-k-y. Utilities supervisor in safety, the New York State Department of Public Service, and I'm New York State party rep. in this investigation. Email address is [redacted].

MR. MCCARTON: Good afternoon. My name is Frank McCarton. I'm the Deputy Commissioner for Operations here at OEM. I am the New York City party rep. on the investigation. My email address is [redacted].

MR. EMEABA: Kalu Kelly Emeaba. K-a-l-u, K-e-l-l-y, E-m-e-a-b-a, NTSB investigator. And my email address is [redacted].

MS. ORGIAS: Sonjay Orgias, Assistant Counsel for the New York City Fire Department, 9 Metro Tech Center, Brooklyn, New York 11201. Office number is [redacted]. Email address is [redacted].

MR. SINGH: Leonard Singh, L-e-o-n-a-r-d, S-i-n-g-h. Chief Engineer of Gas Distribution, Con Ed. NTSB party rep. on this case. [redacted].

MR. CHHATRE: Thank you very much.

INTERVIEW OF ROBERT CANNELI

BY MR. CHHATRE:

Q. Mr. Canneli, we understand you were the first, I guess, apparatus at the scene. So if you would kindly just go ahead and walk us all through that day, what happened, how did you learn about the accident, your actions?

A. Okay. I was working on the mentioned day at Engine 58. It was early during the day tour, which starts at 9:00, and I was upstairs in the firehouse, which is located only, I guess, about four or five blocks from the incident. And I heard and simultaneously felt, I didn't know exactly what it was at the time, but it sounded like a, sounded and felt like a, you know, some sort of car accident or some form of explosion or a derailment.

So I immediately headed downstairs into the firehouse because I could tell we were going to be responding to whatever it was. And as I got downstairs to what we call the apparatus floor,

some of the other firefighters in the house were coming into the firehouse. You know, I could tell there was certainly a -- you could tell there was something wrong, you know, something big had happened.

They had gotten word from, I guess, people who were in the vicinity that there was -- something happened on Park Avenue. We weren't sure exactly where, but we just started to go. We didn't, I don't recall ever being dispatched, but we started to head towards Park Avenue. And I was expecting a derailment because, obviously, the metro north train is there. And as I proceeded -- I was driving the apparatus. We proceeded out of quarters and I turned left onto 112th Street from 5th Avenue and then headed straight to Park Avenue, turned left onto Park Avenue.

At that time, I was expecting to see a train off the elevated tracks, but I, obviously, I didn't see that. But there was, a lot of people as I could see a lot of people, a lot of activity, a few blocks ahead as I was, you know, heading towards 116th Street and Park. People were waving us in. You know, you could tell that there was, you know, something big had happened. You know, there was a lot of excitement.

At that point, as I reached 116th Street, I could then see the fire. You know, because of the elevated tracks there and all the stone work, I wasn't able to see it until I got to 116th Street. I made the left onto 116th Street and there was -- fortunately, there was a hydrant right on the corner of 116th

Street and Park Avenue. It was on the northwest corner of that intersection.

Q. Just let me show --

A. Let's see.

Q. Go ahead --

A. Yeah. I proceeded north on Park Avenue. I turned left and I was able to take this hydrant right here on the northwest corner of Park Avenue and 116th Street.

For my purpose, it was an ideal hydrant to be able to have access to. The back of the apparatus was in line with the sidewalk. So the other members of my company were, you know, easily able to what we call stretch hose lines right to the fire. The hydrant was in perfect working order and I was able to get water, you know, immediately.

There was a lot of debris around. I wasn't -- initially I had some concern that, about the safety of where I was parked, because there was a car parked right in front of where I was and the hydrant that I took that was, you know, crushed from the debris, and which was amazing to me because there was a building --

Q. The car here was crushed?

A. Yeah. Yeah, there was, yeah, a car. The hydrant was right here and there was a car parked right there, which was, I mean -- well, I'm not going to say it was completely crushed, but it was pretty --

Q. Damaged?

A. -- severely damaged. And there was a huge chunk of the roof parked right in front of my apparatus as well, you know, so initially there was some concern of mine that it might not be the best place to be, but as it turned out, it was fine. There was the one explosion and there was no future, you know, need for a concern about that, but as far as my company's job that day, it worked out very well, you know, because of where I was parked and the location and that was out of the way; other apparatus were able to get in.

So I was able to give water to the firsthand line, the hose line. And then there were additional hose lines that were stretched off my apparatus. They didn't, I don't recall exactly where the hose lines went. I do remember that one of them went through the roof. I believe it was the roof here on 91-93 East 116th Street, and from there, they were able to, you know, put out the fire of where the explosion had taken place.

I provided water for three hand lines. There were three hose lines off my apparatus. Unfortunately, I can't recall to whom I supplied water. I certainly did not supply water to tower ladders, which were used that day. I didn't provide any of those lines. There were other engine companies around. There were some water issues. Any time you have a fire of that magnitude with that many hand lines, you're going to come across, not always, but it's not uncommon to come across hydrants that aren't in working

order. So there was some issues with water, but there were many, many hand lines stretched and there wasn't -- I don't think it impeded the operation at all.

Other than that, my job is to stay at what we call the pump panel and I just got to make sure, it's important for me to make sure that the hydrant water coming in is sufficient and the pressures of all the hand lines are all adequate. And we have gauges on the apparatus to make sure that all those pressures are acceptable. And that was never a concern for me. Ordinarily, we try not to use one apparatus to provide three lines. But in that situation, it just happened that way, you know? Companies need to pick up hand lines and I was, I had adequate water pressure, so I was able to provide them.

Q. What is a typical adequate pressure for you?

A. Well, based upon distance from the apparatus and the amount of, the amount and type of hose line, whether it be 1 inch and 3/4 hose line or 2 1/2 inch hose line, there are certain pressures that we supply. You know, there's friction loss, there is, at the nozzle, you need a certain pressure and then there's elevation. So we take all those things into account and I never had any issue with any of the pressures.

Q. Could you just briefly address your background, how long you have been with the fire department, whatever training you got?

A. Okay. I've been with the fire department since 1993, which it would be, at that point, about 21 years, approximately,

at that time. I was, I received training to be what we call a motor pump operator or a chauffer back in, I guess, about 2004. So I've been driving the fire truck almost exclusively since 2004, although I am qualified to take any position, but that is the position that most of the time I'm given because of my seniority in the house.

Q. Okay. Now, so do you stayed with your fire engine all the time and --

A. I was with the engine the entire time.

Q. Okay. Upon your arrival, did you smell any natural gas odor, anything that could be a telltale sign as to what might have caused the explosion?

A. No. I never smelled anything. I mean, there was a heavy, heavy fire condition at the time. But I never, no, I did not smell gas.

Q. Okay. Did you ever go to, in front of 1644 and 1646 buildings, ground zero buildings? I mean, you're parked right here?

A. Yeah.

Q. Do you ever walk around any of these locations, around --

A. I wasn't able to get very close because the street was, the street was, it was a lot of debris. There were cars parked in front. So I never, I don't believe I ever got close to the front of the building.

Q. Okay. So tell us what else you saw besides the roof in front of you, a car damaged?

A. Well, there were a lot of windows that were blown out, you know, a lot of glass. In addition to that section of roof, there was other debris that wouldn't ordinarily be at the type of, the normal type of fires that I've been to. It seemed to me that, you know, from what I had heard and what I had felt and what I had seen that it was a gas explosion. But as far as smelling anything, I never smelled gas.

Q. So for the fire department, at what level you start when you come in as a new person?

A. When you get assigned, when you get appointed to the fire department, you go through the fire academy, which, at the time that I was a firefighter, was a nine-week academy.

Q. Okay.

A. And I was assigned Engine 58. I was there until, I think, 2006. I briefly was a fire marshal. I did that for about a year and a half.

Q. Okay?

A. And then I returned to Engine 58 and I've been there since.

Q. Back again? Okay. In your long tenure, are you involved in the past in accident of this magnitude?

A. The biggest thing I've ever been to was September 11, 2001.

Q. Okay.

A. I was at the Trade Center on that day and the magnitude of that was certainly a lot larger.

Q. Oh, yes.

A. But other than that, as far as I can recall, that was the largest scene that I had been involved with, especially being the first one there.

Q. Now since the accident, did you guys have any, what I consider, the lessons learned meeting within your group of people to find out what went right, what went wrong, what could be improved?

A. We often hold informal critiques of any fire emergency that we go to, and that day was no different. We did discuss it. I spoke to one of the guys. Yeah, we all got together and one of the men, Thomas Long (ph.), who is assigned to 58 Engine, I complimented him on the job that he had done on that day. As far as we were concerned, everything went like clockwork, you know. Everything was, we felt as though we'd handled it as best as we could and, you know, we didn't find any issues with any of our tactics.

Q. And what time did you leave that day?

A. I believe I was there until about 5:00 or 6:00 p.m. that day.

Q. Okay. And what is your normal shift? Is it 12 hour, 24 hour?

A. The day shift is 9:00 until 6:00.

Q. Okay. But you do just a day shift? Some firefighters have, like --

A. Yeah.

Q. -- 24-hour shifts and --

A. I don't recall. I could certainly check into that. But I don't recall if I did. I don't ordinarily work very many 24-hour shifts, so, but I'm not positive --

Q. Okay.

A. -- about that day.

Q. Since you are there until 6:00 that day, do you hear about the secondary explosion that happened on Park Avenue? Did you hear it? Did you see it? Anybody told you?

A. No, I did not.

Q. Okay. Anything else you'd like to add, something that we did not ask you that might help us? You were there, so we are seeing the accident through your eyes, so --

A. Sure. Other than the large volume of fire, that was the thing that struck me most was it was just a tremendous amount of fire and, you know, for us, it's difficult for us to, you know, to be too aggressive and do too many searches too quickly until the fire is put out. So there was a tremendous amount of fire, you know, and that's --

Q. That's a --

A. -- that's the only thing I can really --

Q. Okay.

A. -- you know, try to let you in on is that it was a, you know, tremendous volume of fire for us. And it was never an interior attack. There was no interior.

Q. Thanks for your time.

MR. CHHATRE: And I'll pass it on to Kelly and anybody else.

BY MR. EMEABA:

Q. Welcome. I know, based on what you've already described, there's not really much to ask, but you mentioned that you had water issues. The water issue, was that as a result of lack of pressure from the fire hydrant or there was no water at all coming from the fire hydrants?

A. It was difficult for me to get a grasp on the big picture of what was going on. There was on, I guess it was on -- right on the corner of the southwest corner of 116th Street and Park Avenue, I'm not quite sure who was doing the work, but there was a lot of jackhammering going on in the street, and from where I was positioned it was very difficult for me to hear all the transmissions that were going on around me. And it went on for -- it wasn't like it was only a brief time, it seemed as though it was going on for what seemed to be hours. So I couldn't specifically tell you what exactly the water issues were because, as far as I was concerned, hydrant that I was on, the water was fine.

But from what I understand, I believe 91 Engine, they had to go all the way around the block, I believe onto 117th Street between Park and Madison to get a hydrant. I believe one of the hydrants, one or more of the hydrants that they were trying to access weren't fully functional. Exactly if they were nonfunctional or not fully functional, I'm not sure. But there was some form of a hydrant issue.

Q. Okay. Following up with Ravi's question, from your own engine, your own vehicle, what pressure do you actually release water? At what pressure, specifically?

A. Okay. We could pump -- do you mean the maximum pressure I can pump or --

Q. The maximum and at what pressure were you pumping at?

A. Well, like I said, there were three hand lines and I don't specifically remember the pressures, but I believe there was -- I had to be pumping at probably about 100 PSI for the first hand line. You know, that's as a result of, like I mentioned earlier, there's friction loss per length and you want a certain pressure at the nozzle, so for the number of lengths that were stretched -- it was a relatively short stretch. It couldn't have been more than, you know, 100 feet, if that. So I think there was, like, they probably pulled off four lengths, so it was probably somewhere between 75 and 100 PSI.

Q. Okay. So is your pressure kind of adjustable by you?

A. Yes. Yeah, that can be controlled. We have gates and

we also have, you can open up the gate and you can get more pressure or you can throttle up the engine to get additional pressure. So as far as I was concerned, I never had any issues with the pressures that I was providing to each of those hand lines.

Q. Okay. So based on the pressure you were, you know, sending out, is the system you're using, your pressure, so is it kind of a compressible system to increase the pressure or what?

A. Well, the way I can increase pressure is to just raise the throttle. It's as though you were just stepping on the gas pedal. If you raise the throttle, it'll increase the pressure.

Q. So it's based on the pressing the throttle?

A. Well, I don't actually use the throttle. There's a computer on the pump panel and that's called the pressure governor. And what I do is if, for example, if I needed 200 pounds of pressure on a given hose line, what I would do is I would open up the gate all the way and if that wasn't, if that doesn't provide me with enough pressure, then I, what I do is there's a button on there I could throttle up using that. And it's the same as if you had -- were to step on the gas pedal. It just, it raises the RPMs of the engine.

Q. Okay. And how long from the time of the accident did you arrive to the site?

A. I've never seen the statistic. As I recall, it was a extremely fast response, given that we self -- how should I say --

we self-dispatched, basically. So statistically I would imagine it was probably a 2-minute response time.

Q. Okay. Is that a standard procedure from the --

A. No, it's not. It's completely not a standard procedure. But as I mentioned earlier, due to the fact that we all heard and felt the explosion and there were some civilian passerbys [sic] who provided some information for us, we, at that time, we decided that we were going to start going. We weren't going to wait to be dispatched. That's the best of my recollection.

Q. Thank you so much.

A. You're welcome.

MR. CHHATRE: Chris?

BY MR. STOLICKY:

Q. This is Chris Stolicky. The question off what you were just talking about, there may not be a standard procedure for how you guys responded, but did you guys have some type of training in abnormal operating. You're trained to recognize, you know --

A. Well --

Q. -- not quite right and you react?

A. -- I don't believe it was anything we were trained in. At the time it just seemed like common sense to us, and it may have been considered a, like, what we call a verbal, you know, if someone comes to us and tells us that, you know, there's a fire or there's an accident or someone hurt, we consider that, like, a verbal. So, you know, what ordinarily would happen is if someone

came to us and said there was some sort of issue, we would notify the dispatcher that we were responding and we'd give them any information that the civilian gave us.

Q. So in this situation, do you relay back to somewhere else to let them know that you're responding?

A. Yes. I believe -- I personally didn't, and I believe, I don't think that 58 Engine did that, but I'm 99 percent sure Ladder 26, who was ordered with us, we were together at the time, I believe they were in contact with the dispatchers as we were responding.

Q. Okay, back to the pumping of the truck. Do you need a minimum pressure coming in to the truck? Or is it more flow?

A. Well, there is a pressure. What happens is if you start pumping and your hydrant pressure drops by 25 percent, then you don't, at that point, you're not going to provide anymore hand lines, you know. You're going to notify the command that you have a hydrant that doesn't have adequate pressure and that you cannot pump for another hand line. But ordinarily, I don't recall specifically that day, in our area we have about 50 PSI from the hydrants and that's certainly adequate pressure to pump three hand lines.

Q. If that drops down to 20, 15 or 10, will you still be able to get enough water out of it?

A. Well, what'll happen is they call it, you run away from water, where if you're not getting enough volume of water coming

in, the pressure governor, which I mentioned, which is located on the pump panel, will automatically -- will accommodate for that and it'll rev up to the engine, and it'll attempt to get more water into it. So we're trained to always utilize the pressure governor, so in instances like that it could make up for any of deficiencies that we have.

Q. Okay. I have one more question. At any point in time did you have to move your hoses to a different location or even to let any more apparatus come through?

A. I don't believe so. Like I said, considering where I was parked and the back of my apparatus, which was where the hose comes off, was even with the sidewalk heading, you know, towards 117th Street, I don't really believe that there was much hose in the street at all.

Q. Okay.

A. It was on the sidewalk and then, you know, maybe just slightly in the street where it came off, but I don't believe that was an issue.

Q. And you didn't have to move any hoses because of water problem?

A. Like I said earlier, where I was and with my hose lines, there were no water issues whatsoever.

Q. Okay.

A. So what other companies did or had to do, I really don't have any knowledge of that.

Q. Okay. Thank you.

MR. CHHATRE: Frank?

MR. MCCARTON: I have no questions.

MR. CHHATRE: Okay.

Len?

MR. SINGH: Just one question.

BY MR. SINGH:

Q. You said you never smelled gas but you thought it could've been a gas fire. What led you to believe that it was a gas fire?

A. Well, the explosion that I heard, it gave me that indication. But other than that, other than the debris and the windows being blown out, those were the indications that gave me that it was a gas explosion. But those are the only things, just things that I noticed, but there's nothing concrete that I felt for sure it was. But that was the indication that I had gotten from all of the physical evidence that I had seen.

Q. Yeah. Just a question. Well, going back, piggybacking on what Chris question was asking you about the makeup, runaway water, right? In your indications on your experience with the truck that day, did you see that as you had three hand lines on there that you had to kind of race to keep up?

A. No. There was, as far as I could see, from everything that I had noticed, I never had any --

Q. Nothing abnormal?

A. -- anything at all with the hydrant pressure. There was no indication of that.

Q. They truck wasn't doing, like, over duty or nothing like that?

A. No. No. And -- no. No indication of that.

UNIDENTIFIED SPEAKER: Ravi?

MR. CHHATRE: Yeah?

UNIDENTIFIED SPEAKER: Leon's got a question.

MR. HEYWARD: How long -- this is Leon Heyward.

MR. CHHATRE: Sure.

MR. HEYWARD: City DOT.

BY MR. HEYWARD:

Q. How long were you out there and stayed hooked up?

A. I was there from, I guess, about from the time that we arrived --

Q. Very beginning?

A. -- until, it had to be probably about 5:00 p.m.

Q. Okay.

A. Then once we, they relived my company, another engine company took my place --

Q. Hooked up?

A. -- and hooked up and -- I'm not quite sure how many hand lines were still being supplied at that time, but we were able to shut down and they took over the pumping operations.

MR. CHHATRE: Chris?

MR. STOLICKY: No, sir.

MR. CHHATRE: Kelly?

MR. EMEABA: I'm okay. Thank you.

MR. CHHATRE: No more questions?

BY MR. CHHATRE:

Q. Have you heard about -- and this is Ravi, NTSB. Do you hear anything about a hole in the street opening on Park Avenue?

A. I did.

Q. And were you there when you heard about that or you heard it later on?

A. I heard it later. I heard -- we received a phone call from the scene asking me if I had noticed anything with the street prior to the incident, you know, in the days, weeks, months leading up to the incident. I personally, I didn't notice anything beforehand about the condition of the street. Now, I drive all the time when I work and so I don't recall. That doesn't mean that there wasn't something with the street, but I have no recollection of anything specific with that location. We don't drive that way that often.

Q. And with your long career with the fire department, are you ever involve in the water main breaks? Do the fire department get involved, called in for other reason if a water main break?

A. Yes. The fire department does respond to water main breaks.

Q. And were you involved personally in any of the water

main breaks in your career?

A. No. I never have been.

Q. That's all I have.

MR. CHHATRE: Nobody has any?

Thank you so much. Oh.

MS. ORGIAS: I just -- sorry. Sonja Orgias. I just wanted, upon review of the call history, I believe if Engine 58 responded around the time of Ladder 26, that's between 9:33 and 9:35 a.m. that morning, so within two to four minutes.

MR. CHHATRE: Okay. So they respond -- you responded at between 9:33 and 9:35, is that what you're saying, by --

MS. ORGIAS: That's what it appears from the call history --

MR. CHHATRE: Okay.

MS. ORGIAS: -- if they responded within minutes of each other.

MR. CHHATRE: Okay. Thanks for that clarification.

Thanks for stopping by, educating us. And if you recall anything, if you remember anything, feel free to get back to us through Frank or, you know, we'd love to hear from you if you remember anything that could help us. Thanks again.

MR. CANNELI: Thank you.

MR. CHHATRE: Off the record.

MR. CANNELI: Thanks everyone.

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	NATURAL GAS DISTRIBUTION PIPELINE LEAK AND MULTISTORY STRUCTURE EXPLOSION IN HARLEM, NEW YORK MARCH 12, 2014 Interview of Robert Canneli
DOCKET NUMBER:	DCA-14-MP-002
PLACE:	New York, New York
DATE:	September 30, 2014

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

_____

Karen A. Stockhausen
Transcriber