CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON HOUSING AND BUILDINGS

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October 24, 2013
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HELD AT: Council Chambers
250 Broadway-Committee Room
16th Fl

B E F O R E:
ERIK MARTIN DILAN
Chairperson

COUNCIL MEMBERS:
Elizabeth Crowley
Eric Ulrich
G. Oliver Koppell
Letitia James
Gale A. Brewer
Melissa Mark-Viverito
Brad Lander
Jumaane D. Williams
Rosie Mendez
Robert Jackson

A P P E A R A N C E S (CONTINUED)

Donald Ranshte
Director
Intergovernmental Affairs and
Executive Analytics
NYC Department of Buildings

Thomas Jensen
Chief of Fire Protection
FDNY

John Caufield
Mid-Atlantic Regional Director
NFPA

Donald Gottfried
Senior Electrical Engineer
NYC Department of Buildings

Frank Ricci
Director, Government Affairs
RSA of NYC

Dean Dennis
Father of Fire Victim

Skip Walker
Home Inspector
Walker Property Evaluation
Services

Russell Ashe
Deputy Chief of Fire Operations
Barre City, VT Fire Department

CHAIRPERSON DILAN: If everyone can just take their cell phones and shut them off with the silent, 'cause private conversations can happen outside of the chamber, and if anyone is here to testify on any of the items on today's agenda, if they could please see the Sergeant-at-Arms and fill out an appearance card before they give their testimony; otherwise we won't know that you actually want to testify. Also indicate which legislative item you wish to testify, either in favor or in opposition to. Sergeant, with that, are we ready?

Alright, so I'd like to [gavel] call this hearing to order and good afternoon. My name is Erik Martin Dilan. I'm the Chairperson of the City Council's Housing and Buildings Committee, and today I'm joined by some of my colleagues. Some are members of the committee; some are not. To my immediate left; your right, Council Member Elizabeth Crowley, to my right is Council Member Eric Ulrich of Queens, as well as Council Member Oliver Koppell of the Bronx. So, today the committee will be holding an initial hearing on three items, all of which will be

tabled at the end of the proceedings as we are not voting them in today, the first of which is Introduction 773, which we will hear first exclusively so that we have a better flow of the hearing, and this would allow plumbers meeting certain standards to register as quote unquote “economically friendly plumbers” with the Department of Buildings, that’s sponsored by my colleague, Oliver Koppell. Then the second portion of the hearing we’ll hear two separate bills, the second of which is Introduction 865, which is sponsored by my colleague, Elizabeth Crowley, and that would require that smoke alarms use a specific photoelectric sensor and the bill would apply to smoke alarms that are installed in residential health care or detention spaces on or after, as of this writing, January 1st of 2013; that’s got to be an error ‘cause it’d be a little too late to do that, but... and the third is Introduction 1111, and that’s introduced at the request of the Mayor and that would require that smoke alarms conform with certain technical standards and sets forward a date that they’d be periodically

placed, but it puts these smoke alarms more along a line of the same standards that we have for our carbon monoxide detectors, which means they have a hard wired battery; that'd be the key change in this law. As I said... this introduction's not yet law. As I said earlier, to keep things orderly, we're going to hear Intro 773 first, followed by the two smoke alarm bills. So we'll hear from the sponsor of the bill at this time on this item, Council Member Oliver Koppell, to give a brief opening statement on his item.

COUNCIL MEMBER KOPPELL: Good morning or good afternoon, I should say, Mr. Chairman and colleagues and everyone else who's here. This bill was introduced some time ago at the suggestion actually of some contractors who were complaining of unfair competition and misleading consumer information where some plumbers were claiming to be eco-friendly; that is ecologically-friendly and really were not following any standards that would recognize them as such. There are, incidentally, some standards. There's an International Association

for Plumbing and Mechanical Operators that does have standards with respect to operating in an ecologically-friendly manner. This bill requires the Building Department to approve a plumber as eco-friendly if they meet the standards that are set either by that organization or other standards set by the Building Department. It's simply a matter of appropriate consumer information and lack of misleading advertising by people who don't adhere to standards and it leaves the Building Department to set the standards.

I just read in the last couple of minutes, Mr. Chairman, the memorandum of the city, which appears to oppose the legislation. It's very peculiar actually, the memorandum, because the memorandum says that recently the department is actually establishing standards with respect to various contractors adhering to ecologically appropriate procedures and techniques. So since they're doing it already, it would seem to me this legislation would fit right into what they're doing. The memo doesn't seem to indicate that they're looking

particularly at plumbers, but as I say, it suggests the department's doing exactly what we want them to do. Since it doesn't particularly relate... what they're doing doesn't particularly relate to plumbers, I still think the legislation is frankly appropriate and it's quite open-ended; doesn't tell the department exactly what it has to do, but just ensures that people who are putting on their trucks and on their advertising material that they're green plumbers meet certain standards or not be able to advertise. So I think the legislation makes sense and is indeed consistent with what the department says they're just starting to do. We didn't know they were doing this when we drafted the legislation 'cause it's several years old, but as I say, it's consistent it seems to me with what the city's already doing and I hope the Committee feels the same way. Obviously, if the committee feels any amendment is appropriate, I'm happy to concur and in the committee... with the Committee Council's recommendations. I will wait and hear... are we... I assume we're going to hear from the city

promptly and I'll certainly wait to hear their comments, but frankly, their memo puzzles me. But thank you for hearing the bill, Mr. Chairman, and I hope we might be able to move it before the end of the current session.

CHAIRPERSON DILAN: And today is the first step in that process. We've also been joined by Council Member Letitia James I guess for the next few months, as many of you...

[crosstalk]

COUNCIL MEMBER JAMES: Weeks.

CHAIRPERSON DILAN: Know or weeks. [laughter] As many of you know she'll be the city's next Public Advocate and it'll be my first chance to congratulate her in public on winning the Democratic nomination.

COUNCIL MEMBER JAMES: Thank you.

CHAIRPERSON DILAN: And I'm certain that she'll win the nomination... or she'll win the election in November and become... [laughter] Well, if you're staging something then... [laughter] Alright, so with that, we will hear... and we will hear from the Department of Buildings on this item and then

Council Member Crowley will get a chance to do her introduction on her item when we move to that point in the hearing. I also have to do the same for the next incoming Borough President of Manhattan, Gale Brewer, who is also here that I acknowledge and get a chance to thank you... or congratulate you publicly on your victorious election, and I know you'll be a great Borough President 'cause you already know everybody in the borough. [laughter] So, congratulations to you too. I'm proud of you both, and we'll hear from the Buildings Department.

DONALD RANSHTE: Good afternoon, Chairman Dilan and members of the committee. I'm Donald Ranshte. I'm Director of Intergovernmental Affairs and Executive Analytics for the Buildings Department. Thank you for allowing me the opportunity to testify on this legislation, which would create a registration of certain licensees of the department as eco-friendly. This bill will amend the Administrative Code of the city by adding Article 421 to Chapter IV of Title 25 titled Eco-friendly plumber registration. On

its surface, we find that the legislation is problematic and we are also uncertain as to its intended scope. The goals of the bill are already being addressed through a program that the department is piloting called Sustainable Contractor Designation Program. In talking about the specifics of the bill, it would require the department to set forth standards for plumbers that are to be designated eco-friendly, a term that does not appear to be defined with any industry or national standards. Also, in Section 28-421.1, we are troubled by the undefined term progressive understanding, something that we wouldn't be looking to tackle at this time.

We are thankful for the opportunity to discuss our Department Initiative, which we believe currently addresses some of the issues identified by this legislation. The Sustainable Contractor Designation Program is a recent Department Initiative that recognizes those individuals who are working to meet today's increased demand for new, green technologies and reduce the city's carbon footprint. The program

identifies contractors who demonstrate knowledge in sustainable practices through accredited third party certifications or credential programs. Contractors who choose to participate in the program agree to promote the use of green technologies to their customers and report those activities to the department. Additionally, the program allows consumers to search for and identify contractors with expertise in green practices. Currently, general contractors, master and special electricians and master plumbers can participate in our program.

How does one, a licensee of the department, currently become a Sustainable Contractor? To apply for Sustainable Contractor Designation, you must have an electronic copy of your certificate ready to upload to the Department; you have an e-filing account with the Department as well. To obtain the Sustainable Contractor Designation, you must have one of the following active licenses or registrations: General Contractor Registration, Master or Special Electrician or Master Plumber and have current insurance information.

Finally, to obtain Sustainable Contractor Designation as a plumber, you must have at least one certification or credential from one of the following accredited organizations: American Society of Heating, Refrigeration and Air Conditioning Engineers, Green Advantage, North American Board of Certified Energy Practitioners, Passive House Institute U.S., U.S. Green Building Council and Urban Green Council of New York. Once all these criteria are met, the designation is posted on our internet site under the license number of the designee. At this time, the department believes that continuing to develop our current Sustainable Contractor Designation Program, rather than creating a new regulatory scheme setting forth new standards for eco-friendly registrations in the department, is the best way to achieve the bill's stated goals. We note that if there are additional third party organizations, and I believe one is mentioned in the bill, that wish to participate in our designation program as it currently exists, we are open to accepting them.

At this time, I thank you for our opportunity to submit testimony on Intro 733, and I would be happy to answer any questions you may have.

CHAIRPERSON DILAN: Yeah, I'm just going to go briefly, and then we'll lead with Council Member Koppell and any other members that have questions on this item specifically. Even though your memo says that you're opposed to the legislation, I have to believe the opposition is to the way the legislation is written it its current form because conceptually you don't sound too far apart. I mean I did take it in your statement that you'd rather see no law passed at all and have the department's program go forward, and the department's program seems to address more than just the plumbing industry, which is good, but from what I heard in Council Member Koppell's opening statement was that he was trying to address what seemed to be like more of a Consumer Affairs issue as people posing themselves as quote unquote "eco-friendly plumbing contractors," when indeed there is no standard that makes them such. So I

guess speak to those differences; the reasons why... you spoke to why you don't like legislation, but I guess if you could speak to his original statement about what some plumbers may or may not be doing in their every day practices as posing as eco-friendly. If you could speak to that as it relates to the legislation that'd be great.

DONALD RANSHTE: Certainly. I think the first part of your question about whether or not we want to codify through legislation either what is intended by the bill or what we're doing with our Sustainable Contractor Program, we're not against that. What we... the difference that we see in the nuance in what both you and Councilman Koppell had mentioned earlier is that the certification is achieved by the licensee of the department through a third party nationally accredited organization, okay, so we believe that the bill is asking us to set forth what the criteria for the certifications would be and set forth I guess some sort of curriculum and/or the criteria that would need to be met to gain that certification or registration in this case by

the department. We think that the terms eco-friendly progressive understanding of environmentally conscious practices are out of the realm of what we could come up with in short-term. We looked around and we haven't found national standards. Each of the organizations that I mentioned in our testimony that we accept the certifications of has a different premise and different curriculum for what their certifications offers those licensees of the department. So what we're saying is by having the designation program in its current form is that a licensee of our department has gone out on their own and gotten additional certification beyond the qualifications to be a licensee of the department and we designate them on our website with a stamp that says if you are a homeowner or someone who is looking to use this licensee because they have this eco-friendly designation Sustainable Contractor Designation, you can go to the organization or body that gave them the certification and see what those criteria are that that licensee that you are going to hire would meet as they do work

in your home or business or building, and that's the difference. It's sort of nuanced, but I believe that at this time, we are really only offering that the licensee of the department has a certification beyond the qualifications that give them the license.

CHAIRPERSON DILAN: Alright and just I guess briefly explain your objection again on the progressive standard that you wouldn't be able to address at this time, as you said in your testimony.

DONALD RANSHTE: So the bill says eco-friendly progressive understanding of environmental friendly practices. We've looked around. We can't find that there is a standard either in the industry or in these organizations across the country and New York City and state that define those terms, you know, and as the organization that regulates the building code, we are uncertain that we would be able to set that standard at this time.

CHAIRPERSON DILAN: Okay and then lastly, just in your understanding of the bill, would this bill have any effect on who's

authorized to do plumbing work in New York City, and if so, what would that be?

DONALD RANSHTE: If I understand your question correctly, Chairman, we would have to under the terms of the bill recognize any plumber who has this designation.

CHAIRPERSON DILAN: [interposing] Well, let me clarify...

DONALD RANSHTE: [interpose] Okay.

CHAIRPERSON DILAN: The question. I guess is there anything in this bill that would I guess circumvent the current standards that you have on plumbing qualifications in New York City? So if somebody wanted to operate under these eco-friendly standards, they would have to... I just want to make sure that the department’s understanding is the same. I believe I have the understanding of it, but they would have to go through the normal channels to get their plumbing license and then if they wanted to be considered quote unquote “eco-friendly,” they would have to reach higher and get a different set of standards that would make

them quote unquote “eco-friendly.” Is that your understanding of it?

DONALD RANSHTE: That is absolutely correct. Yeah, the qualifications for obtaining a license to be a master plumber in New York City is spelled out in the Building Code and would not change. This would be a further designation; certification; registration, whichever term you want to use.

CHAIRPERSON DILAN: Thank you. Council Member Koppell?

COUNCIL MEMBER KOPPELL: Yeah, frankly, I’m still somewhat confused as to your opposition ‘cause it seems consistent, but if we look at the first Section 28-421.1, you have a problem with the term progressive understanding, proficiency and competence and I’m not... I think what your problem is with the work progressive. If we took the word progressive out and we just said, “it shall reflect understanding, proficiency and competence in the plumbing trade regarding the use of eco-friendly methods and supplies,” does that... is that in any way confusing? Maybe the word progressive

is a little ambiguous. I think by progressive we meant up to date, but let's say we take that out. Isn't that sort of obvious that in order to be an eco-friendly contractor you have to have an understanding, proficiency and competence regarding the use of eco-friendly methods and supplies?

DONALD RANSHTE: I think I tend to agree with you, Councilman. It's certainly by not qualifying what an understanding is. You either have the understanding or you do not have the understanding, so that would definitely clarify that portion of it. I think that still at its root we're grappling with whether or not those standards are something that we could quantify and then hold someone accountable to.

COUNCIL MEMBER KOPPELL: Well, let me ask you this. Have you looked at the standards created by the International Association for Plumbing and Mechanical Operators that we make reference to? Have you looked at those?

DONALD RANSHTE: We have, yes.

COUNCIL MEMBER KOPPELL: And do those make sense?

DONALD RANSHTE: They make sense in so far as all of the other organizations that we've looked at and you can get a certification in do. They're not our standards and what the licensee is saying is that they would uphold the standards of that certification. That's why I offer in our testimony that if that organization, which currently doesn't participate in the Sustainable Contractor Program, would like to, we would certainly have them.

COUNCIL MEMBER KOPPELL: Let me say, the bill is open-ended. You can require anything you want in creating this certification program, so I... and again, I... it's completely open-ended. The Building Department can do whatever it wants in terms of certifying or licensing the people as eco-friendly. The idea here is whatever tests you think you deem appropriate can be applied under the terms of this bill. It's just that you have to establish standards, which you say you're doing anyway.

I'm not sure that I would be satisfied, to be honest, with what you're saying you're doing 'cause all you're saying is that the plumber has this certification. I think that it might be wise if you're certifying a business not only to require the certification of the plumber, but also some evidence that they're following certain procedures and methods, but the bill does... leaves that open. I think it would be a good thing. I frankly think your program may be somewhat limited in its scope, but if that's all you want to do, fine; you or your successors, whatever. The idea here is to have a specific program because right now if you look around the city you see trucks from plumbers and they say we're green plumbers or we're eco-friendly plumbers, and there are no standards for that and what... what the bill suggests is there should be standards. Anyway, Mr. Chairman, I think... I'm certainly happy to look at amendments to language and I think the word progressive may in fact be a little bit vague and maybe should be taken out. Aside from that, I think the bill makes sense.

CHAIRPERSON DILAN: Just from my observation, it looks like there is room to have some discussion where we can make it where one, the legislation is a little tighter in terms of what the scope is, and the open-endedness of the bill could very well be an issue with the people that review the legislation at the Buildings Department. That could be an issue as well, but it sounds like the intent of what both the Council Member and the agency is trying to do is not that far off. It looks like they just disagree on language, so I guess at some point we'll be in contact with the department and with Council Member Koppell to see if we can hash this out and see if there's a path forward. Council Member Brewer.

COUNCIL MEMBER BREWER: I just have one question. The groups that are assigned to, I guess, who make the determination; those listings that you gave us; those groups, so who supervises their programs to be sure that they're doing you know, like the American Society... whatever? Who makes sure that they're doing the right thing to make sure that

they’re teaching like the U.S. Green Building Council? I know them, but are they going to teach when they... so that when they give accreditation it means something? That’s what I don’t know.

DONALD RANSHTE: And I think that, Coucilwoman, that’s the question at the heart of our discussion...

[crosstalk]

COUNCIL MEMBER BREWER: Right.

DONALD RANSHTE: Here today.

COUNCIL MEMBER BREWER: That’s right.

DONALD RANSHTE: We are not endorsing their curriculum.

COUNCIL MEMBER BREWER: I know.

DONALD RANSHTE: We are only saying to a potential... someone who is going to hire a licensee of the department; that that person who you’re going to hire who has a license from the department and is fully licensed to do the type of work that you are asking them to do also has a separate accreditation or certification that we do not endorse.

COUNCIL MEMBER BREWER: Okay, but I don't... it's a little iffy. I'm just saying it... I mean these groups may be good, but who knows if they're doing a good thing? I mean I'm just saying. It's like the same problem we had with my bed bug exterminators, right?

DONALD RANSHTE: Mm-hm.

COUNCIL MEMBER BREWER: We didn't know that whatever they got would teach them about bed bugs. You know, they knew about cockroaches, but they didn't always know about bed bugs, so we had that same problem and I don't know that we solved it; we tried, so... 'cause we gave them... the Department of health gives them some kind of criteria. It was hard. So I'm just saying that's why I think there's a challenge here because the groups that... the companies that... you know you don't... we had fly-by-night bed bug exterminators and they were in competition with the ones who really knew what they were doing and we had that same issue of what makes it an exterminator who really understands the process 'cause the state doesn't do that. They just give you pest control and go

for it, so I don't know. You can't... is there anybody who could have some kind of accreditation of these groups or something to show that they're really doing...

DONALD RANSHTE: [interposing] Sure, I think that's something that we can discuss and...

COUNCIL MEMBER BREWER: [interposing] Then that might be... that's not the heart of the problem. So you get a... I know the U.S. Green Building Council; the head of it used to be here with the City Council. He's excellent, but does he know about plumbing? I don't know, so et cetera. I think you need to... if you're going to... even if you're going to do your project on how you can work in Council Member Koppell I don't know, but I do think just 'cause somebody has U.S. Green Building Council doesn't mean they know about eco-green or whatever it's called eco. I just throw that out.

CHAIRPERSON DILAN: Yeah.

COUNCIL MEMBER KOPPELL: Mr. Chairman, if I might comment, sir, I think

Council Member Brewer is right on and that's why we don't limit the idea of certification here merely to having a certificate from one of these groups. We require that there be particular standards for plumbers. Now, there are standards that are there from the organizations we cite, but we don't say you have to adopt those standards. Obviously the Commissioner of Buildings should develop a series of criteria that will be applied to these plumbers and they'll have to show that they can meet those criteria and broadly, I think if you take the word progressive out, those criteria are what is stated in the bill and that's the idea, not to rely just on a certification from some organization, but to have the business show that they are following the procedures necessary to protect the environment.

DONALD RANSHTE: Councilman, I think that's a conversation that we can continue to have with you and the Chair.

COUNCIL MEMBER KOPPELL: I mean I'd think that the Building Department would have to do a regular rulemaking and develop rules and

standards and have public hearing and comment. That's... that's... typically my experience has been that's a function of the agency, not of the legislature; not of the Council. We give the power to the Commissioner to set up rules to follow the idea that the green plumbers should get a specific designation. and Mr. Chairman, there's no intention here to stop anybody from being a plumber. If they have a regular plumber license they don't have to be a green plumber, but they shouldn't be able to advertise that they're a green plumber when they don't follow or meet certain standards. That's the only idea we're trying to get at. We're not trying to stop anybody from doing business.

CHAIRPERSON DILAN: Never said they were. I just...

COUNCIL MEMBER KOPPELL: [interposing] Right, good, I just want to make that clear.

CHAIPERSON DILAN: Yeah.

COUNCIL MEMBER KOPPELL: Okay, thank you.

CHAIRPERSON DILAN: Okay, thank you. Any other members on this topic?

COUNCIL MEMBER BREWER: Later on you'll tell us the difference between a regular plumber and a green plumber, but not now.

CHAIRPERSON DILAN: Well, I think that's what he's trying to get at.

COUNCIL MEMBER BREWER: I know. I have no...

[crosstalk]

CHAIRPERSON DILAN: Is that, yeah.

[cross-talk]

COUNCIL MEMBER BREWER: Idea, but somebody will tell us.

CHAIRPERSON DILAN: With that, we just have one piece of testimony for the record on this item, and that's from the International Code Council from Dorothy Harris and that will be entered into the record as of read in full on this item, and that will conclude this part of the hearing. Mr. Ranshte, do you want to bring the Fire Department forward so we can begin?

[Pause]

CHAIRPERSON DILAN: We've been joined by Council Member Melissa Mark-Viverito of Manhattan and the Bronx.

[Pause]

COUNCIL MEMBER KOPPELL: While these people are getting ready, Mr. Chairman, I might note that that testimony is basically supportive, although they don't want to reference any specific standard. So it is supportive of the idea. Thank you.

[Pause]

CHAIRPERSON DILAN: Okay, at this time, I want to just give the dais to my colleague and the sponsor of this item, which is Elizabeth Crowley on 865, and I spoke on 111 at the outset. I won't do it again, so Council Member Crowley.

COUNCIL MEMBER CROWLEY: Good afternoon. I want to thank my colleague and chairman, Council Member Erik Dilan, for hearing these two smoke detector bills today. I am Elizabeth Crowley, as he said, and I chair the Fire Committee here at the City Council. I introduced the Photoelectric Smoke Detector

Bill, which would require the use of photoelectric smoke detectors in residential and institutional buildings throughout New York City because I believe the evidence shows that the chances of surviving a fire condition are infinitely better if you have a photoelectric smoke detector in your home as opposed to a more commonly used ionization detector. This is because photoelectric smoke detectors detect smoke up to a half an hour or more before ionization detectors do and photoelectric smoke detectors are much less susceptible to nuisance alarms caused by cooking, smoke or shower steam.

The New York City Fire Department estimates that more than one-third of homes in New York City have inoperable smoke alarms or detectors because the batteries have been removed in order to eliminate just the nuisance alarms. Moreover, ionization detectors have been shown to have a greater than 50 percent failure rate in smoldering fires, which most often occurs at night while occupants are asleep and therefore, are more likely to result in fire fatalities.

Chances are that the vast majority of the people here today in this room or watching this hearing have only smoke detectors in their homes that are ionization detectors and that's why I've introduced this bill. In each of the last years in the City Council we've had approximately 66... in the city of New York we've had approximately 66 civilian fire fatalities. Requiring the use of photoelectric smoke detectors would greatly reduce this number. The state of Massachusetts, Vermont and Maine and many cities in Calfornia and Ohio and even Boston have all passed photoelectric smoke detector legislation. In the years since Boston's Photoelectric Smoke Detector Law went into effect the number of fire fatalities decreased in dramatic rates.

I have discussed this legislation with the FDNY Chief of Fire Protection, Chief Thomas Jenson, who is here today to testify. I thank him for his attention to the issue. I'd also like to let the experts know that there are people from all around the country who are here to testify from California, Ohio, Vermont and

others from as far away as Australia have submitted testimony. All the testimonies whether given in person or submitted electronically will be included in the record and made available on the Council's website. I thank all the people who are here today who are advocating on this subject and I look forward to hearing and reviewing the testimony today to further evaluate this information. Thank you.

CHAIRPERSON DILAN: Thank you, Council Member Crowley. Chief Jensen, welcome. I guess you can begin your testimony on both legislative items, both 111 and 865, and you can introduce the other members of the panel, who have joined you.

CHIEF JENSEN: Okay, thank you. With me is John Caufield from the NFPA and representative Donald Gottfried from the Building Department. Yes, sir?

DONALD RANSHTE: Donald Ranshte.

CHIEF JENSEN: Donald. Okay, good afternoon, Chairman Dilan and members of the Council. I am Tom Jenson and I am the Chief in Charge of the Bureau of Fire Prevention for the

New York City Fire Department. Thank you for the opportunity to speak with you today about two bills that amend a New York City Building Code relating to smoke detectors. We support Intro 1111, which would require owners to replace smoke detectors when they exceed the manufacturer's suggested useful life and also require newly installed alarms be equipped with an audible end of life warning device.

We oppose Intro 865, which would require photoelectric smoke detectors in residential buildings and occupancies such as nursing homes, hospitals and hotels. The FDNY appreciates the Council's concerns regarding fire safety and your efforts to increase awareness about the fire detection technologies available on the market. As you may be aware, Local Law 75 of 2011 required periodic replacement of carbon monoxide detectors in dwellings upon the expiration of the manufacturer's suggested useful life. That Local Law did not include smoke detectors, so Intro 1111 closes the loop regarding replacing out of date devices. With this bill, non-

working smoke alarms, as with CO detectors, will have to be replaced and newly installed alarms will have to be equipped with audible end of life warning signals. The Fire Department strongly supports this bill. It carries out the intent of NFPA 72, which provides that smoke alarms be replaced after 10 years and will help to save lives. In accordance with Local Law 26 of 2008, the Fire Department is in the process of drafting legislation to update the city's Fire Code to reflect current fire safety standards and technologies. As with the 2008 Fire Code Revision, the FDNY has proposed amendments to the latest edition of the International Fire Code and will submit those proposed amendments in the form of a Council bill to the City Council for its consideration very soon.

The reason I mention this with respect to Intro 865 is that we would prefer that any dictate, legislative or otherwise, regarding the use of smoke detector technology be promulgated by the experts; the National Fire Protection Association and/or the International

Code Council. We believe that introducing a bill to require a single technology; photoelectric as opposed to ionization at this time is premature. We are not the experts and do not have the resources to do extensive research, but we do look to the experts before we make changes to the city's Fire and Building Codes. We have reviewed the research on smoke detector technologies and do not believe there is a universal consensus about the superiority of photoelectric in the circumstances called for in this bill to justify our support. Until the research is more conclusive about the preferred technology and either the NFPA and/or ICC make that determination, we will not support a bill mandating the use of one technology over the other even to the extent it is circumscribed in Intro 865. When we propose revisions to the Fire Code and when the Department of Buildings proposes changes to the Buildings Codes, we rely on the respective model codes and national experts for guidance. By proposing Intro 865, the sponsors are not relying on clearly established research or uncontroverted findings

of experts in the field. The goal of the FDNY is to make sure every home has a working smoke alarm. It is our continuing mission to provide education about the dangers of fires and the actions the public can take to ensure their safety. Taken together, these will lead to safer homes and fewer injuries and fatalities due to fire. When we are asked about smoke alarms, we have expressed support and preference for dual alarms, a combined photoelectric and ionization smoke alarms in line with current NFPA recommendations, especially when they are outfitted with alarm silencing devices that can be activated when there is a false alarm.

Research has shown that each smoke alarm technology has unique advantages under certain fire conditions. As you know, photoelectric alarms are most reliable for smoldering fires, which may occur in bedrooms or sitting rooms. Ionization type alarms are the most reliable for flaming fires, which may occur in the kitchen. While some municipalities and states have legislated the use of photoelectric in certain circumstances, we do not think the

issue is ripe or the evidence conclusive. The NFPA cautions that technology's still evolving and studies are being conducted. According to a recent Underwriters Lab Report, the key challenge in selecting the appropriate smoke alarm technology is the inability to predict the type of home fire that is likely to occur. For this reason, nationally recognized fire safety organizations including NFPA, USFA and International Association of Fire Chiefs, NIST, National Association of State Fire Marshalls and UL all currently recommend use of both photoelectric and ionization smoke alarms in residential settings or the use of smoke alarms incorporation both types of these sensing technologies in a single device.

Lastly, notwithstanding our general concerns about the prematurity of Intro 865, we also find it curious that the bill's provisions include hospitals, prisons, assisted living facilities and other residential institutions. These occupancies usually have complex fire detection and alarm systems designed by engineers. New technology is being developed

every day. We think that the engineers designing these systems should be able to make professional judgments about what smoke detector technology to install and not be limited by strict Building Code Provisions that would become law if Intro 865 is enacted. You will hear shortly from the NFPA and other experts. They will provide their opinions on the bills and the technology. The FDNY remains open to hearing all sides. That is our job and we are open to continuing discussions with the City Council, but for now, we will not lend our support to Intro 865 for all of the reasons I have just stated, and we fully support Intro 1111. I thank you again for your support for fire safety in New York City and for the opportunity to speak with you today about the proposed legislation.

CHAIRPERSON DILAN: 'Kay, Chief Jensen, thank you for your testimony and I believe you laid out quite clearly the positions of your department and I appreciate that. I'm going to have a few questions on both items, and I'll start with 1111 first and before I do that,

I do want to acknowledge that we were joined by Council Member Brad Lander of Brooklyn who was here very briefly, and we are being joined now by Council Member Jumaane Williams of Brooklyn, who just walked in. So we'll start with 111 and as I understand it it's... [background voice] oh, 1111, not 111. It's similar to legislation that this Committee passed in and around the carbon monoxide detectors where the device will be required to be hard wired. What are the mechanisms for cost recoupment in that legislation? Was that that the fee for that unit would be passed onto the tenant? Is that the same in this legislation before us today?

CHIEF JENSEN: Yeah, I believe it is. It's very, very similar to the CO Bill.

CHAIRPERSON DILAN: So is the cost of the apparatus the same as...

CHIEF JENSEN: Should be very similar.

CHAIRPERSON DILAN: Should be, so what are we looking at, like a $25 to $50 pass along to the...

[crosstalk]

CHIEF JENSEN: Yes, in the area...

[crosstalk]

CHAIRPERSON DILAN: Tenants?

[crosstalk]

CHIEF JENSEN: Yes.

CHAIRPERSON DILAN: Alright, so what was the objective of this in your department? The objective is to get it hard wired for what purpose or benefit?

CHIEF JENSEN: Well, actually 1111 is the end of life to 10-year with the batteries.

CHAIRPERSON DILAN: Yeah, that’s what... I’m speaking...

[crosstalk]

CHIEF JENSEN: Yeah.

CHAIRPERSON DILAN: Only on that one...

[crosstalk]

CHIEF JENSEN: Right.

[crosstalk]

CHAIRPERSON DILAN: Right now, yeah.

CHIEF JENSEN: Right. So to make sure we follow the NFPA guidelines to make sure that the smoke detectors are operable.

CHAIRPERSON DILAN: Operable, okay so you... so the NFPA guidelines are basically moving away from the traditional battery operated smoke detector. Is that what you're telling me?

CHIEF JENSEN: Well, hard wire is always the best, but in many cases when you're replacing batteries, hard wire would be difficult, so now you have a 10-year life span on a battery. The new construction hard wire is required in many places, but in replacement, that would be quite expensive to hard wire so...

CHAIRPERSON DILAN: [interposing] Okay, so my term was incorrect then in terms of hard wire.

CHIEF JENSEN: Yes.

CHAIRPERSON DILAN: So it's...

CHIEF JENSEN: We're not requiring hard wire and this is really replacement smoke detectors for present detectors and it's a

superior detector because it has a 10-year life where you don’t have to change the battery.

CHAIRPERSON DILAN: So the battery life would be 10-years so...

[crosstalk]

CHIEF JENSEN: Yes.

[crosstalk]

CHAIRPERSON DILAN: That means that they would... there’s new technology available that would extend the life of these batteries...

[crosstalk]

CHIEF JENSEN: Yes.

[crosstalk]

CHAIRPERSON DILAN: For 10 years. Now, how... I guess I would assume your department has tested this and could you just tell us anything about the testing and the reliability...

[crosstalk]

CHIEF JENSEN: Well...

[crosstalk]

CHAIRPERSON DILAN: Of this?

CHIEF JENSEN: We have not tested it. We rely on the national... the testing services to thoroughly test these.

CHAIRPERSON DILAN: Well, I'm sure you've read their report...

[crosstalk]

CHIEF JENSEN: Yes.

[crosstalk]

CHAIRPERSON DILAN: For that.

[crosstalk]

CHIEF JENSEN: Of course, yes.

CHAIRPERSON DILAN: Can you tell us a little bit about their reliability and why the department feels comfortable making this change at this time?

CHIEF JENSEN: Maybe the NFPA representative might be better able to answer that.

JOHN CAUFIELD: In the National Fire Alarm Code as NFPA 72 in the 2010 and 2013 editions, it is recommended the 10-year life cycle...

CHAIRPERSON DILAN: [interposing] I'm sorry, I just need to interrupt you so...

[crosstalk]

JOHN CAUFIELD: I'm sorry.

[crosstalk]

CHAIRPERSON DILAN: That you can introduce yourself and your own name.

JOHN CAUFIELD: I'm sorry, yes.

CHAIRPERSON DILAN: And if I could ask the chambers to come to order because it's a little bit difficult to hear the speakers.

JOHN CAUFILED: Yes.

CHAIRPERSON DILAN: Go ahead.

JOHN CAUFIELD: I'm sorry...

CHAIRPERSON DILAN: Mm-hm.

JOHN CAUFIELD: Chair, my name is John Caufield. I'm the mid-Atlantic NFPA Regional Director. I'm the former Fire Chief in Rochester, New York where I served 27 years and I've been with NFPA for about a year and a half. But NFPA 72 is the National Fire Alarm Code and, as I said, in the past two editions it was recommended hard wired smoke detectors in occupancies for new construction, as well as a 10-year self contained battery unit. At the end of the 10 years, essentially that's the life

cycle of the unit itself; no more replacing batteries according to this recommendation and standard and you just get a new unit, and over the course certainly of the next 10 years, technology is likely to have changed pretty dramatically, but at this point in time there's no issues of tampering or anything like that; taking batteries out. Additionally, that same NFPA 72 also recommends hush devices to minimize nuisance alarming, which has been shown to be a leading cause of having batteries removed from existing smoke detectors. I hope that answers your question.

CHAIRPERSON DILAN: I wanted to know a little bit more about the reliability of the unit because as it relates to the other bill, Chief Jensen just stated that he couldn't you know, certainly vouch for the effectiveness of the photoelectric smoke detectors so I was under the assumption that they would've done the same type of testing for this new unit that they're asking us to bring into the New York City market. You know, I would expect that some due diligence was done, but I just want the

committee to be enlightened on why they feel the 10-year life span on the unit is actually going to last 10 years and serve as what will serve to more reliable than what we currently use.

JOHN CAUFIELD: Understood. Like any kind of electronic product, and I'll just sort of paraphrase, there's a life cycle on these types of things, particularly with ionization, even though detectors there's a small, minute amount of radioactive material there, as well as the technology and so on and so forth, but there's just a natural life cycle. There's a date of expiration if you will. In terms of... it's like I heard a few different things in your question.

CHAIRPERSON DILAN: No, I just... I want to focus in and around that.

JOHN CAUFIELD: Yep, Underwriters Laboratories typically does the testing on the individual units. NPFPA's role is to write codes and standards through a consensus process of experts in the field. That's kind of where we come in. We don't do the testing, but the testing is taken into account by the technical

committees at NFPA and has made those recommendations based on expert opinion, testing, particularly of UL.

CHAIRPERSON DILAN: Alright, so I'll just... I'll ask both gentlemen, both Chief Jensen and yourself, are you confident that this product will do... from where you sit in your opinion, do you... are you confident that this product will do what you're telling this committee it will do?

CHIEF JENSEN: Yes, I am confident with you know, the reputation of UL and the testing that's been done and actually I just bought one for my own house recently.

CHAIRPERSON DILAN: Okay, well, it just sounds like since you bought one, it might be a little bit more expensive because of the useful life of the battery than the traditional...

[crosstalk]

CHIEF JENSEN: Yes, it...

[crosstalk]

CHAIRPERSON DILAN: Smoke alarm...

[crosstalk]

CHIEF JENSEN: It is... it is a little more expensive.

[crosstalk]

CHAIRPERSON DILAN: That is traditional.

[crosstalk]

CHIEF JENSEN: But if you figure in that you're not changing the battery every year...

[crosstalk]

CHAIRPERSON DILAN: You make it...

[crosstalk]

CHIEF JENSEN: It probably works out about even.

CHAIRPERSON DILAN: Yeah, you make it up. Okay, so I wanted to focus on another line of questioning as it relates to 1111. You know, obviously an audible alarm won't help much if the occupants are deaf or hearing impaired. Is there any requirement for any other form of fire notice for the deaf or the hearing impaired?

JOHN CAUFIELD: There are a number of different evolving technologies, but there's

been things such as strobe lights and things... units that can kind of attach to your bed and jar you awake if you're hearing impaired. That research is really far behind sort of the traditional public consumption smoke detectors, but it is ongoing. In Rochester, we have a very significant hearing impaired population, and I have some personal experience with testing those units. The strobe lights have worked reasonably well, but that's just anecdotal based on my own experience. I don't have in front of me any kind of studies or anything from the UL.

CHAIRPERSON DILAN: Alright, but what I'm asking is 1111 will, I guess, make permanent law the audibility of the fire alarm with a 10-year life. Anything above and beyond that like the strobe light for instance would be an optional device that the homeowner could install. Is that pretty much the gist of how this law is written?

CHIEF JENSEN: If there's certain conditions of the occupants of the home, there are technology that they can look into. This is generally to make the use of smoke detectors

more prevalent ‘cause they wouldn’t be taking the batteries out and it’s safer for the general population, but there are different technologies for the special cases.

CHAIRPERSON DILAN: Alright, I think I got it. Basically what you’re saying in a nutshell and if I understand, ‘cause I think I know your answer, I just want to make sure I understand what I’m reading. The audibleness of the smoke alarm will remain. Homeowner will have an option to go above and beyond that if there’s someone hearing impaired. Is that the general sense of what’s happening here?

CHIEF JENSEN: That’s correct.

CHAIRPERSON DILAN: Okay, thanks. So moving onto 865, and I’ll be brief and I’ll turn it over to my colleague, Elizabeth Crowley. Is there anything that either in the Building Code or the Fire Code today, as it stands current law, that would prohibit the photoelectronic smoke detectors? Is there anything that prohibits it?

CHIEF JENSEN: Prohibit; not that I know of.

CHAIRPERSON DILAN: No.

JOHN CAUFIELD: No.

CHAIRPERSON DILAN: No, so the homeowner's choice at this point in time as to which type of unit that they decide to use. In the department's tracking of fires, when there is a fire does NYPD keep track of the type of smoke alarm present in fatal fires, and if so, do you have a breakdown of that?

[crosstalk]

CHIEF JENSEN: No, we keep track if there was a smoke alarm if it appeared to be operating, but we do not keep track of what type of smoke alarm.

CHAIRPERSON DILAN: Of what type, so you keep track if it was operating, if it had a battery in it and if it had...

CHIEF JENSEN: [interposing] That's correct.

CHAIRPERSON DILAN: Okay, got it. With that, I will turn it over to my colleague, Elizabeth Crowley. I may have more questions on this, but I want to give her an opportunity to jump in.

COUNCIL MEMBER CROWLEY: Thank you to the administration for testifying today. Chief Jensen, do you have a photoelectric smoke detector in your house?

CHIEF JENSEN: I... let's see, I believe I have one downstairs and the one upstairs is an ion I believe. I'm not... actually the new one I'm not positive. It may be a photo.

COUNCIL MEMBER CROWLEY: And you have your photoelectric one likely near a kitchen?

CHIEF JENSEN: No, well, no, it's really in the basement. We have an alarm near the kitchen that I believe is an ion.

COUNCIL MEMBER CROWLEY: I ask because within the education material that the Fire Department puts out it says, "If you are shopping for a new alarm, the FDNY Fire Safety Unit; Fire Safety Education Unit recommends photoelectric or photoelectric ionization smoke alarms because they are less sensitive to nuisance alarm and they also alert occupants to smoldering fires more quickly than the common

ionization alarms." Do you know how much more quickly in a photoelectric would detect a smoldering fire versus...

[crosstalk]

CHIEF JENSEN: Well, I...

[crosstalk]

COUNCIL MEMBER CROWLEY: An ionization?

CHIEF JENSEN: I have read some of the literature recently, so I'm not going to say how many seconds, but clearly no one disputes photoelectric is not quicker for smoldering. That's never been in dispute.

COUNCIL MEMBER CROWLEY: So it is quicker.

CHIEF JENSEN: Yes.

COUNCIL MEMBER CROWLEY: Okay and is one more likely to experience a fire fatality from smoke inhalation or from a raging fire in the city of New York in residences in your experience?

CHIEF JENSEN: I don't know the exact numbers, but there is a high incidence of

people succumbing to smoke inhalation. I don't know the exact percentage.

COUNCIL MEMBER CROWLEY: Well and the reason I bring it up is because through the research that I've done, it shows that photoelectric smoke alarms are able to pick up smoldering fires in some cases more than a half an hour earlier than ionization, and then at some points even if you have a working battery in an ionization smoke detector, it may not pick up until the fire is actually raging that the smoke could fill the house completely and it doesn't go off.

CHIEF JENSEN: Well, I don't know if that's quite the case, but I believe the NFPA the latest suggestions or recommendations I should say are to have a combination detector or have a combination of detectors place in different parts of the house where they would be most useful.

COUNCIL MEMBER CROWLEY: Right now, but the City Building Code doesn't call for any photoelectric and that's why we're having the hearing today.

CHIEF JENSEN: Yeah well, it doesn't specify, yeah.

COUNCIL MEMBER CROWLEY: Right. Well, most New Yorkers don't know of this problem. I didn't know of it until it was brought to my attention and now I have photoelectric smoke detectors, but do you have any estimate of how many New Yorkers know the difference or have actual photoelectric in their homes?

CHIEF JENSEN: I do not.

COUNCIL MEMBER CROWLEY: If your position from the Fire Department is that... and the Buildings Department is here as well, that it should not be included in the Building Code within residential homes, then why does the Fire Safety Education Unit suggest that people should buy the photoelectrics versus the ionizations?

CHIEF JENSEN: I think at this time the jury is still out on recommendations like that through the national professionals at testing labs and NFPA.

COUNCIL MEMBER CROWLEY: If one is more likely to die in a smoldering fire, if an

ionization is not likely to pick it up; certainly not as quick as a photoelectric and you yourself have it in your home, doesn't it make sense to put it in the Building Code?

CHIEF JENSEN: I believe the Fire Department's... no, I'm here to state the Fire Department's opinion that at this time we don't believe specifying one alarm over another is proper due to the current information and testing.

COUNCIL MEMBER CROWLEY: Also mentioned earlier that an ionization, which is the traditional one that most people have in their homes is more likely to go off when nuisance smoke happens in a kitchen or from the steam that comes out of a shower. Is that true?

CHIEF JENSEN: Yes, that's why they recommend certain different placements for these different alarms.

COUNCIL MEMBER CROWLEY: Right, and even we... and I totally am behind Intro 1111 to get a 10-year battery on whatever type of smoke detector it is. The fact of the matter is if an alarm goes off in a nuisance way, whether it's a

10-year life span on the battery or less, a lot of times New Yorkers will take the battery out of the smoke detector will not even work thereafter if it never gets put back in; however, if it’s a photoelectric, it’s less likely to have a nuisance alarm and therefore, a resident is less likely to play with the battery, correct?

[crosstalk]

CHIEF JENSEN: Well, technology’s... that’s correct, but technology also now a lot of the... they have these hush buttons and if you... proper placement also will reduce that, but... but... but we would...

[crosstalk]

COUNCIL MEMBER CROWLEY: But it’s true that photoelectric...

[crosstalk]

CHIEF JENSEN: We... we...

[crosstalk]

COUNCIL MEMBER CROWLEY: Is less likely to...

[crosstalk]

CHIEF JENSEN: We all strive...

[crosstalk]

COUNCIL MEMBER CROWLEY: Less likely to have an incident.

[crosstalk]

CHIEF JENSEN: To education and this new technology to reduce the amount of people who... to take the batteries out of their alarms. That’s a big problem.

[Pause]

COUNCIL MEMBER CROWLEY: I have no further questions.

CHAIRPERSON DILAN: But she gave me one on 111 or 1100 and Gale, I can wait if you want to...

COUNCIL MEMBER BREWER: [interposing] No, go ahead.

[crosstalk]

CHAIRPERSON DILAN: Go now.

COUNCIL MEMBER BREWER: I don’t know one fire law from another.

CHAIRPERSON DILAN: On... well, I guess I mean I read the briefing report. It talked about it a little bit, but that is a great question. Why don’t you just establish

for us, ‘cause we’re not all experts on this. Could you just establish the difference between the two different pieces of apparatus that we’re debating today on 765? And then I got a question on 1111.

JOHN CAUFIELD: This is mostly what I came here to speak about, is 865 in particular. I’ll kind of work off script, if you will. There’s two different primary types of smoke detectors. There’s ionization and then there’s photoelectric. Typically 30 years plus of testing, study, task groups, you name it have all kind of come to the same general conclusions. One, that ionization detectors tend to work... activate more quickly in fast moving or flaming fires and two, that photoelectric detectors tend to work and activate more quickly in smoldering fires. The issue is really how do you know what kind of fire you’re going to have? The incidence of... and I say this sort of anecdotal; I don’t have evidence to back it up in front of me, but as you know, years ago New York State passed a Fire Safe Cigarette Bill, so cigarettes, for

instance, self-extinguish. It has not been in place long enough to have good, measurable data to sort of say what the effect of that is, but suffice to say that there's a lower incidence of potential for a smoldering fire. What my position is and NFPA's position is one detector works best at one type of fire and the other one works best at another type of fire. Go with the dual sensor. I did that in my professional... in my previous professional career in Rochester. We installed dual action detectors for years, and we did see probably again anecdotally, but we had zero fire deaths in Rochester for three consecutive years for the first time in our recorded history. It's anecdotal, but it's a cause and effect issue. I'm sorry, do you have...

CHAIRPERSON DILAN: No, I'm just thinking on the side. I visited Rochester this summer. They have beautiful housing in Rochester and some...

[crosstalk]

JOHN CAUFIELD: Well...

[crosstalk]

CHAIRPERSON DILAN: Some of the best housing per dollar I think in the state. It was beautiful housing there.

JOHN CAUFIELD: Well, thank you. Yes, it's...

[crosstalk]

CHAIRPERSON DILAN: Yes.

[crosstalk]

JOHN CAUFIELD: It's home to me and...

CHAIRPERSON DILAN: [interposing] Yeah.

JOHN CAUFIELD: I appreciate that. He... if I... it is cold in the winter.

CHAIRPERSON DILAN: It's cold, yeah.

JOHN CAUFIELD: Yes.

CHAIRPERSON DILAN: That's why it's so cheap. [laughter]

JOHN CAUFIELD: If I... [laughter]

CHAIRPERSON DILAN: You know you get a deal there.

JOHN CAUFIELD: Good point. If I can kind of conclude or work through my testimony here kind of...

[crosstalk]

CHAIRPERSON DILAN: Mm-hm.

[crosstalk]

JOHN CAUFIELD: Quickly. I got to work off script, but essentially a smoke detector...

CHAIRPERSON DILAN: [interposing] Well, you know what? We were confused because the Fire Chief brought you up together, but you came to testify in your right, so you do have... I know this is kind of backwards, ‘cause we normally don’t do it this way, but you do have the right to read your testimony in full if you so choose to.

JOHN CAUFIELD: I tend to submit my testimony...

CHAIRPERSON DILAN: [interposing] Okay.

JOHN CAUFIELD: And you can read that...

[crosstalk]

CHAIRPERSON DILAN: That’s fine.

JOHN CAUFILED: And that’s just...

[crosstalk]

CHAIRPERSON DILAN: It's your...

[crosstalk]

JOHN CAUFIELD: And then I have notes so I work off script. I just do it better that way.

[crosstalk]

CHAIRPERSON DILAN: It's your prerogative. It helps me...

[crosstalk]

JOHN CAUFIELD: Well, I...

[crosstalk]

CHAIRPERSON DILAN: Get out of here faster. I...

JOHN CAUFIELD: I... I appreciate that.

CHAIRPERSON DILAN: Yeah.

JOHN CAUFIELD: We'll try to be as concise as possible. I try to do that with my written testimony.

CHAIRPERSON DILAN: Okay.

JOHN CAUFIELD: Real quickly. Smoke detectors: basically their main job for a lay understanding is to sense a fire or the products of a fire, which is typically smoke or ions or

whatever the case might be, but sense the presence of the fire and activate with the result to give the occupant as much time to safely evacuate the building as possible. Now, there is all kinds of again, anecdotal, but probably more than anecdotal. I don't have the information in front of me. The nature of a fire in any structure is dramatically different now than it was when I started my career and Chief Jensen started his career. There's more and more synthetics in all kinds of building materials; all kinds of you know, tables, chairs, toys, fabrics. It's synthetic. It burns hotter; it's petroleum-based. So what evidence is showing through UL testing, evidence is showing that there is a decrease in the amount of time from notification where the alarm goes off to the person safely evacuating the building. In smoldering fires, there has been... and it depends on the magnitude of the fire and a whole lot of other factors including smoke travel and windows open, all kinds of things. A smoldering fire can go anywhere from 30 minutes to over two hours before it could

reach the threshold to activate a smoke detector. It depends on a myriad of factors. The flaming fires obviously you know, a cooking fire or something else, but a flaming fire obviously is present quite quickly; you can see it. It doesn't take 30 minutes, 60 minutes to build up where anybody's going to notice it. That's kind of the key component and that's really what those two technologies focus on. Again, you don't know what kind of fire you're going to have in your house, apartment, building, so NFPA's position and others; International Fire Chiefs, Underwriter Laboratory has done extensive studies on smoke detectors; really recommends dual action smoke detectors, taking advantage of the... logically you take advantage of the strengths of both. You're not minimizing one; you're not choosing one over the other, so that seems to me to be a logical conclusion so...

CHAIRPERSON DILAN: [interposing] So...

JOHN CAUFIELD: I'm sorry.

CHAIRPERSON DILAN: Go ahead, go ahead. You know, I'm sorry. You go ahead.

JOHN CAUFIELD: A couple quick things.

CHAIRPERSON DILAN: Mm-hm.

JOHN CAUFIELD: Smoke detectors are very effective. In 2001, data from NFPA and the U.S. Fire Administration there was about 4,000 fire deaths in the United States in 2001. 2011 that number was about 2,600, so we're going in the right direction. Something's working well. There's certainly room for improvement, and new technology hopefully will do that. Two-thirds of all the U.S. fire deaths; home fire deaths occur in residences without working smoke detectors or no detectors at all. Two-thirds of those there's nothing present or it's certainly not working. Chief Jensen mentioned hard wired smoke detectors. 92 percent activation in a fire large enough to activate the fire... the smoke detector. 92 percent I'll say success rate. That's sort of a...

CHAIRPERSON DILAN: [interposing] I guess they would be susceptible to electrical fires.

JOHN CAUFIELD: Well, there's a lot of issues.

CHAIRPERSON DILAN: [interposing] Yeah.

JOHN CAUFIELD: So I say success. By success I mean that the detector properly sensed a fire and warned occupants. That's not quite the same as occupants safely getting out of the house. They're related, but they're not... they're not...

CHAIRPERSON DILAN: [interposing] Not the same.

JOHN CAUFIELD: Direct correlation. However, with battery operated; solely battery operated smoke detectors, that success rate drops to 77 percent. Now again, these are statistics and there's a lot of factors going behind that, but clearly that's driven the standards that require for new construction, hard wired smoke detectors. As I said, it all really, in my opinion, boils down to what kind

of fire you're going to have and there's no logic, in my opinion to choose one technology over the other. As I said, you know, the evidence doesn't really do anything; doesn't have an opinion, but it is what it is. It's evidence. It's research-based. There's more than 30 years analysis including research; hard scientific research. There's studies; there's work groups. I reviewed reports from California Fire Marshalls; the Maryland Fire Marshall; the Ohio Fire Marshalls. They all put together task groups. Again, all these groups. Scientific groups, work groups, professionals in the fire service have all essentially and independently come to the same conclusion, okay? They've come to the same conclusion. They cannot, and specific to 865, they do not specifically say that photoelectric or ionization are a better choice. They said take advantage of both technologies, have a smoke detector in every sleeping area, on every floor and so on and so forth. A lot of these things are also incorporated in the National Alarm Code; the Fire Alarm Code. But the key is they've all

reached the same independent conclusion. They're reviewing each other's work, but UL has done extensive testing on evacuation times and smoke travel and so on and so forth. There's nothing scientific or evidence-based that says a photoelectric detector is superior to an ionization detector. I'm not here to bad-mouth photoelectric detectors. In fact, my detectors in my own home, and I just had a new alarm system put in, are dual action throughout my whole house. It protects me and my family. We're taking advantage of both technologies.

I'll kind of conclude my testimony. NFPA 72 is a National Fire Alarm Code. As I say, it doesn't support one technology over the other. It does support dual action detectors to leverage the strength of both types. The key is escape time. The alarm needs to go off; the occupant needs enough time to safely evacuate the house. There's a lot of reasons why people can't necessarily get out. It's not... because there's a fire death doesn't mean that there is necessarily a problem with the smoke detector. There's human involvement in every fire or

almost every fire at some level. People need to know what to do to get out of a building. People need to have an escape plan. Kids need to go out and know how to do this without their parents. There's been instances throughout the country where people discover a small fire, try to fight it and get overwhelmed either by the fire or the smoke. There's a lot of factors that lead to fire deaths in a home. Certainly we all look forward to better technology, and I think 865 limits the city of New York to one type of smoke detector that hasn't proven its value as the only solution to this problem. I think I'll conclude at that. You know, I don't support it because the evidence doesn't speak to it. NFPA 72, the Fire Alarm Code, does not support one over the other nor does any of the other studies and research that's been done in my experience.

CHAIRPERSON DILAN: Okay, so Chief Jensen, just explain to me, because I don't pay as much attention to this as I should, what type of product is available to New Yorkers? What's available in New York? Is there... how

prevalent is the combination product to New Yorkers? And it seems to be by your testimony and by the NFPA... is it Caufield? Is that how you say it?

JOHN CAUFIELD: Caufield, yes, sir.

CHAIRPERSON DILAN: Mr. Caufield's testimony that the dual product is the superior product, so why are we not looking to do more around... in and around the dual product?

CHIEF JENSEN: Well, the dual product is fairly new. It is superior. You can get maybe not exactly the same efficiency similar if you place the right detectors; an ionization in a certain area, a photoelectric in a certain area; not quite as a dual, but it brings up the level of protection. Duals are available. They of course a little more expensive than the single...

CHAIRPERSON DILAN: [interposing] Yeah, well...

[crosstalk]

CHIEF JENSEN: Detectors.

[crosstalk]

CHAIRPERSON DILAN: I would imagine, and thankfully I've never been in a fire, but I would imagine that for a raging, flaming fire that people would know that there's a raging, flaming fire in their unit, maybe not in the rest of the building, but at least in their unit. With a smoldering fire, I would think you'd caught off guard more and you know, you could be sleeping and just not know it and not hear an alarm.

CHIEF JENSEN: Oh, it depends. A flaming fire moves very fast you know, so it's... it just...

[crosstalk]

CHAIRPERSON DILAN: You got less time...

[crosstalk]

CHIEF JENSEN: There's differences.

CHAIRPERSON DILAN: To get...

[crosstalk]

CHIEF JENSEN: There's differences.

CHAIRPERSON DILAN: And you know hopefully...

[crosstalk]

CHIEF JENSEN: It's a different thing, exactly.

CHAIRPERSON DILAN: Hopefully I'm never in that situation or anyone else. Just wanted another question and I see Gale getting my attention. A question on the nuisance testing on the new 10-year life span batteries that you're asking us to approve. Now, if this thing goes off like a nuisance, I'd be doing everybody a big disservice to give them a battery that can't go off; then they'll end up taking the unit and throwing it away and that wouldn't help anybody either, so if you could speak to...

[crosstalk]

CHIEF JENSEN: Well, you never should take the battery out. They...

CHAIRPERSON DILAN: [interposing] Well, now they won't be able to take the...

[crosstalk]

CHIEF JENSEN: They won't be able to take that...

[crosstalk]

CHAIRPERSON DILAN: Battery out.

CHIEF JENSEN: When they take it out it's dead, yeah.

CHAIRPERSON DILAN: Alright, but now they'll want to know about nuisance testing 'cause there's going to be a lot of frustrated...

[crosstalk]

CHIEF JENSEN: Well, a lot of it's...

[crosstalk]

CHAIRPERSON DILAN: People if this thing goes off...

[crosstalk]

CHIEF JENSEN: A lot of it's placement.

[crosstalk]

CHAIRPERSON DILAN: And you can't turn the battery...

[crosstalk]

CHIEF JENSEN: A lot of it's placement. They do have the hush buttons on some of them that will quiet it for a few minutes and then it resets, but a lot of it is placement.

CHAIRPERSON DILAN: Alright, so you're... placement and that would be across the board for any type of smoke detector.

CHIEF JENSEN: Right. If you have a detector near your bathroom and you open it up and steam comes out from a shower, we have to move it. If you have it too close in the kitchen, you have to move it. There are guidelines; exact guidelines that are put out, but it's also common sense.

CHAIRPERSON DILAN: So are you aware of any nuisance testing on 111 with properly... 1111 with...

CHIEF JENSEN: [interposing] Nuisance testing?

CHAIRPERSON DILAN: With proper...

[crosstalk]

CHIEF JENSEN: Mm...

CHAIRPERSON DILAN: Placement?

JOHN CAUFIELD: I'm sorry, I don't understand the question.

CHAIRPERSON DILAN: Well, under the current fire detectors that we use now they have a battery. Batteries are often pulled out

because of a nuisance that goes off in the apartment that makes the alarm sound. Assuming for a second that all placement's the same, they're still going to have the same nuisance, but now they have a unit where the battery will not go off, so the only other option would be to remove the entire unit itself because it has a 10-year life span on the battery. So what you're saying is that the hush button is the answer to that and placement is the answer to that, but it wasn't tested say to differentiate between someone taking a hot shower or someone you know, cooking a steamy plate of penne. Is that what you're saying?

CHIEF JENSEN: It's really the same alarm; it just has a 10-year battery...

[crosstalk]

CHAIRPERSON DILAN: That...

CHIEF JENSEN: And...

[crosstalk]

CHAIRPERSON DILAN: That's what I was...

[crosstalk]

CHIEF JENSEN: The only way to resolve it is to you know...

[crosstalk]

CHAIRPERSON DILAN: That’s what I was looking...

[crosstalk]

CHIEF JENSEN: Put it in the right spot.

CHAIRPERSON DILAN: That’s what I was looking for. It’s basically the same alarm. The only thing that’s different is the battery. So the testing on how prevalent it goes off in case of a nuisance would be exactly...

[crosstalk]

CHIEF JENSEN: It depends.

[crosstalk]

CHAIRPERSON DILAN: The same.

CHIEF JENSEN: Yeah.

CHAIRPERSON DILAN: But it would be exactly the same as the current unit that we...

CHIEF JENSEN: [interposing] Yes.

CHAIRPERSON DILAN: Commonly... so okay.

[crosstalk]

CHIEF JENSEN: I mean if once a week your wife burns the food it's going to go off no matter what, you know.

CHAIRPERSON DILAN: She doesn't burn the food thankfully so.

CHIEF JENSEN: No. Good for you.

CHAIRPERSON DILAN: I don't have any further questions. Council Member Crowley, do you have any follow ups?

COUNCIL MEMBER CROWLEY: I do.

CHAIRPERSON DILAN: Yeah.

COUNCIL MEMBER CROWLEY: I know that Gale was... oh, you don't. okay, good. So the 10-year battery, is it available for dual smoke detectors?

JOHN CAUFIELD: Yes, absolutely. They're widely available. You know, home stores; Home Depot, those kinds of places. Maybe even drugstores, but yes, widely available.

COUNCIL MEMBER CROWLEY: I haven't been able to find the one with the 10-year battery, and I think what's also important is a lot of times you see dual, but it's dual with

carbon monoxide detector and the smoke detector, not dual 10-year battery with both smoke detectors, and the reason I think it’s so important to have the photoelectric as part of the law in the city... in the Building Code is because New Yorkers think... when they think dual they thing oh, I need a smoke detector and a carbon monoxide...

[crosstalk]

CHIEF JENSEN: Carbon monoxide.

COUNCIL PERSON CROWLEY: Not I need two different types of smoke detectors, but Mr. Caufield, earlier you know, you said what the National Fire Protection Association guidelines are. I have paperwork here that shows me that your rule 72 recommends a photoelectric in your kitchens, and so you’re recommending that that particular smoke detector be in the household near kitchens and it’s part of one of your rules.

JOHN CAUFIELD: Yes.

COUNCIL MEMBER CROWLEY: Okay and then furthermore, you said that things are changing today with synthetics; that people may

or may not realize it, but polyesters are synthetics and that's what you know affordable couches are made of today and years ago you might have wool or more wooden or leather, but today... and it extends into the kitchen and throughout the house.

CHIEF JENSEN: Yeah.

COUNCIL MEMBER CROWLEY: Comforters, curtains and it's just more affordable and much more likely to smolder than other materials. It's just earlier the Chief mentioned that more people are dying from smoke inhalation than a raging fire. That's where people die, in fires in New York City. They're more likely to, and whether you have 10 fires or 100, you're going to have more people of those fatalities that happen die because of smoke inhalation than the damage caused by a raging burning fire with flames.

CHIEF JENSEN: That might...

[crosstalk]

COUNCIL MEMBER CROWLEY: Is it or not... is that not true?

JOHN CAUFIELD: I would speak to that. That's kind of a nuanced argument. I can't speak to... specifically to New York City or even my own city where I live, but it's kind of a nuance that...

[crosstalk]

COUNCIL MEMBER CROWLEY: But in your years.

JOHN CROWLEY: Yes, definitely.

[crosstalk]

COUNCIL MEMBER CROWLEY: Of being a Fire Chief.

JOHN CAUFIELD: But because people dying from smoke inhalation doesn't mean that there's not a flaming or raging fire.

COUNCIL MEMBER CROWLEY: But...

[crosstalk]

JOHN CAUFIELD: So...

[crosstalk]

COUNCL MEMBER CROWLEY: But do you... and just to conclude it, because we have other witnesses...

JOHN CAUFIELD: [interposing] Sure.

COUNCIL MEMBER CROWLEY: Today because of materials being synthetic, you're more likely to have smoldering fires.

JOHN CAUFIELD: I couldn't... I... I don't share that opinion.

COUNCIL MEMBER CROWLEY: Okay, I have no further questions.

[Pause]

CHAIRPERSON DILAN: Alright, seeing no other questions, I'd like to thank all of you gentlemen for your time...

CHIEF JENSEN: [interposing] Thank you.

CHAIRPERSON DILAN: And testimony.

CHIEF JENSEN: Thank you.

CHAIRPERSON DILAN: We will... yeah, we will now hear testimony from the public on these two items. I saw no testimony earlier on the plumbing bill aside from the one we received for the record. Alright, we'll do...

[Pause]

CHAIRPERSON DILAN: We'll do Frank Ricci from RSA, who's here to sign up on 1111. We'll do... looks like Ronald Skip Walker, who's

here to testify in favor of 865 and Dean Dennis, who's also here to favor... to provide testimony in favor of 865. Why don't we start with... well, you can go together. [background voices] So you can come up.

[Pause]

CHAIRPERSON DILAN: It doesn't matter which way you do it; just come forward. Well, you can both come forward, yeah. Guess we'll wait for them to settle in and then... well, why don't we have... why don't you wait... why don't you wait a second if you got a slide? We'll let Mr. Ricci testify on his own. This way he's...

FRANK RICCI: [interposing] I'll be brief, I promise.

CHAIRPERON DILAN: He can testify without the slideshow and then you guys can come in, so just give us a second. Take... give the seat a second. I didn't realize it was a PowerPoint that you're going to show us. So Mr. Ricci, why don't you begin and then we'll move on.

FRANK RICCI: Thank you, Mr. Chairman and members of the committee. My name is Frank Ricci. I'm the Director of Government Affairs at the Rent Stabilization Association. We are the trade association that represents most of the residential multiple dwelling owners in New York City. We have about a million units in the portfolio of our members. I'm here today to speak only on Intro 1111. We are generally in favor of the bill. We support it. We have some technical issues with the logistics of the replacement period time that the bill outlines. Because of the... in the recent last year when the City Council passed the Carbon Monoxide Detector Bill, many owners chose to put in combination CO detector/smoke detector units in their buildings and so the way the bill was crafted now, we didn't want to see a wholesale replacement of a lot of those units that were just put in a year ago. So we've talked to the administration. We've made some suggestions as to how we could get everyone on a cycle of replacing the units as we go forward. More specifically, the section of the bill that deals

with the replacement of smoke detectors when they reach the end of their useful life, the way the bill is written out is a little problematic because I think a lot of people don't know when the... what the useful life is of a smoke detector. There's a recommendation that it's replace them every 10 years, but since in a lot of buildings if you take your typical 100, 200 unit building you know, because of people moving in and out or sales of co-ops and condos and the replacement of them, it's a little difficult to keep track of when one was put in and to have to go back again and find out when something is 10 years old. The reality is that a lot of smoke detectors do go beyond that useful life of 10 years, so they stop working when they stop working. So when someone goes to replace a battery in them and they use the test button, if it doesn't work, then clearly it's time to replace it and we're fully in support of the concept of smoke detector using the 10-year tamper-proof battery. Incidentally to that, since this is the Housing and Buildings Committee, since oftentimes your hearings center

around HPD and code violations, I have years worth of testimony here from various HPD commissioners that will tell you the most common violation that an owner is written up for in New York City, that is the tenant's responsibility, is a missing battery in a smoke detector. So that's why we think the concept of a 10-year battery that's tamper-proof make perfect sense and will hopefully reduce the number of violations that are written in the city. So with that, as I said, I've communicated some of these concerns to the administration and I guess as time goes on we'll see if they're amenable to any of these changes just so that we can get on a cycle of replacing everything going forward in a more orderly fashion.

CHAIRPERSON DILAN: Yeah, I think the point you brought up about the dual fire and CO2 detector's a valid one. It's what I have in my unit now and it's relatively new as a result of the legislation that we passed as a valid one. There's going to be many owners that say hey, the city asked us to do this several years ago. We passed the cost onto our tenant and now

we have to do this again and pass the cost onto the tenant again. So... [coughs] excuse me. So we'll keep an eye on that and see how that develops, but I don't think that it would be an impediment to pass on this. We just have to work on a way to solve this problem, and you know, maybe with the previous panel I confused this point, but I was just very concerned that if the nuisance standards of these smoke detectors are going to be the same from one product to another, absent a requirement on a hush button, what you're going to get is tenants that take the whole smoke detector...

FRANK RICCI: [interposing] Right.

CHAIRPERSON DILAN: And throw it away and then owners are going to be getting the violation for no smoke detector. That's kind of what I was looking at, 'cause we could make the battery 10 years and people solve the problem; they do the pull out battery away, but if they don't get that thing to go off, they're going to take the whole unit and put it somewhere else, so that's a little bit of a concern and I want either the Fire Department or the administration

to address how we solve that problem, and the hush button could be the problem, but then I have to know it's standard on all products and I don't know if you have any opinion...

[crosstalk]

FRANK RICCI: No, no, I... look, whatever they feel is the best product we're going to put it in. We're not going to argue with tenant safety on things like that. we just wanted to make sure it's done in an orderly fashion so that you know, people aren't replacing them every two years or every three years you know, just because they put in new ones two or three years ago, and certainly going forward every one new one should be whatever they specify. I've... I... you know, this issue has come up in Albany too, which I also cover, and I've said that you know, maybe the best thing is to pass a state law that prohibits the sale or specifies that only one type is sold in the entire state. This way no one has to worry about what they're buying because I think I heard Councilwoman Crowley mention a few minutes ago that you go into a home center store,

whatever one, it’s very confusing. For me it’s very confusing.

CHAIRPERSON DILAN: You should’ve seen our first conversation about this bill. You want to do what?

FRANK RICCI: Yeah.

CHAIRPERSON DILAN: I had no idea what she...

[crosstalk]

FRANK RICCI: Yeah.

CHAIRPERSON DILAN: Was talking about.

FRANK RICCI: So there’s a wide variety out there and you know, if the Fire Department and the experts they rely on specify one type and one type only, we’re going to do that, but you know, it’s... we just need to do it in an orderly fashion.

CHAIRPERSON DILAN: Okay, any other questions? Council Member Brewer.

COUNCIL MEMBER BREWER: Just how would it work... I know nothing about this. I mean I don’t even know what we have. I have no idea, but my question is if you’re an owner and

you have a certain kind of fire alarm now, so you're saying that... how would it switch to something that has the 10-year battery? You're trying to figure out...

[crosstalk]

FRANK RICCI: Well, the require...

[crosstalk]

COUNCIL MEMBER BREWER: What that process...

[crosstalk]

FRANK RICCI: Right.

COUNCIL MEMBER BREWER: Would be.

FRANK RICCI: But the requirement is now that if a tenant vacates... generally when there's a vacancy in an apartment, the owner will do...

COUNCIL MEMBER BREWER: [interposing] Put in a new one.

FRANK RICCI: Put in a new one, yeah.

COUNCIL MEMBER BREWER: I see, okay.

FRANK RICCI: So going forward, I don't...

[crosstalk]

COUNCIL MEMBER BREWER: Okay.

FRANK RICCI: And I think on a vacant... and I think the Intro 1111 requires it on all vacant units; the owner do that. That's not an issue.

COUNCIL MEMBER BREWER: Okay, so that's how it's done now.

FRANK RICCI: Yeah.

COUNCIL MEMBER BREWER: Okay.

FRANK RICCI: And but then if a tenant who's responsible for replacing the battery in the current one, says, "Hey, I keep putting the battery in and I push the button to test it and it doesn't work," then the owner's got a responsibility to get them a new one, so that's not an issue either, but the way this bill is written it says also at the end of the useful life of a smoke detector, which no one is going to really be sure of given the fact that we have you know, two million apartments in the city, how you go about that in an orderly fashion is a problem, so we're saying you know, by a date certain in the future everyone should

replace every one of the smoke detectors if they haven’t done so by today, alright?

COUNCIL MEMBER BREWER: Okay, so that would make it more orderly.

FRANK RICCI: Yeah.

COUNCIL MEMBER BREWER: Okay.

CHAIRPERSON DILAN: And maybe it’s an opportunity that I missed, but it would be helpful if the device had an expiration date on the device so that they’d be a little bit more...

[crosstalk]

FRANK RICCI: I’m told they do have an expiration date on them, but...

[crosstalk]

CHAIRPERSON DILAN: So that means...

[crosstalk]

FRANK RICCI: The fact that they’re up there now you know, the... can you imagine the... how labor intensive it would be to go into every apartment where you... also access is an issue and try and look at every one of them and figure it out.

COUNCIL MEMBER BREWER: Yeah, you can't get into my apartments, mm-mm. Thank you.

FRANK RICCI: I was going to say I've been in your house, but...

COUNCIL MEMBER BREWER: You can't get into my constituents' apartments.

FRANK RICCI: Oh.

COUNCIL MEMBER BREWER: They're not going to let you in.

FRANK RICCI: Right. Well, that's it. That's...

CHAIRPERSON DILAN: Well, as long as the... and in my mind I'm thinking theoretically here, 'cause I'm certainly not an expert, if there's a clear visible date as to when the unit expires at least the tenant knows that their family's not protected and may want to do the right thing by their own family and let the owner know that the device is expired, which may solve... which may solve the problem, but we'll discuss that with...

FRANK RICCI: [interposing] But when you have the 10-year battery in there it's going to solve it, because at that point it's going to

beep and you can't replace the battery, so you have to replace it.

CHAIRPERSON DILAN: Yeah, that's...

[crosstalk]

FRANK RICCI: Yeah.

CHAIRPERSON DILAN: That's exactly what I'm talking about.

FRANK RICCI: Yeah.

CHAIRPERSON DILAN: That the expiration is on the battery, not the unit itself or however they... I'm not even familiar with the product, so I have to get familiar with it. Any other questions? If not, thank you...

FRANK RICCI: Thank you.

CHAIRPERSON DILAN: For your time and testimony. So it looks like there's no other testimony on Intro 1111. All of the testimony is on 865, so why don't we call up the gentlemen... how did you prefer to do it... oh, so Dennis followed by Mr. Walker, then we have... next we'll call up... well, John Caufield already testified, so we don't need to call him up, and then the last... the last would be Russell Ash.

[Pause]

DEAN DENNIS: Thank you very much.

COUNCIL MEMBER CROWLEY: You can begin.

DEAN DENNIS: Alright.

[crosstalk]

COUNCIL MEMBER CROWLEY: Mr. Dennis.

[crosstalk]

DEAN DENNIS: My name’s Dean Dennis and I came from Cincinnati, Ohio to testify. I think this issue 865 before you is exceptionally important. I heard a lot of information and I... some of it was very accurate; some of it was not accurate. I’m here to show you why this was an excellent idea and this 865 should be passed. First, I want you to meet my family. I have two daughters, two lovely daughters and a lovely wife. This is Andrea. She was my first born. I was adopted, so she actually was my first blood relative. She was born in 1982. Two and a half years later, I was blessed with another daughter, Ally [phonetic]. The kids grew up not only as sisters, but as very best friends. Where one went the other one went.

You can see from the pictures how close they are. The older one's always taking care of the younger one. Our girls grew up to be lovely women, and then one day a fire happened at Ohio State University. We lost Andrea. Fires are pretty common, more so than you think. We never thought we would have the short end of a lottery of losing our daughter. Andrea died with four other students. In the house; in the housing there are six ionization smoke alarms. Half of them were disabled because they were nuisance alarms and the police and Fire Department had constantly has trouble in that building. Two years later, there was another fire. My daughter died at home Sunday, 4:00 in the morning. Two years later, Palm Sunday 4:00 in the morning, my one daughter, Ally, called crying very upset. Her best friend, Marion [phonetic], almost went to a party, decided to go home at the last minute; happened to be another fire. Palm Sunday, 4:00 in the morning, Miami University Ohio, three students died. That house had more than a dozen ionization smoke alarms and by the time the first one

sounded, they believe two or three other kids were already dead and one kid was found 10 feet from the door. Other kids had to drop and jump out through the window. The fire was believed to have been smoldering for more than a couple hours in a couch downstairs. Ionization alarms did not alert in time and as a result, lives were lost.

Now, I became an expert about two years later, when a Boston Fire Chief named Jay Fleming, who I think will be submitting his testimony, who's been studying fires forever, called Doug Turnbull, whose daughter, Julie, died two years after Andrea and said, "You know, your daughter would've been alive if that house had been equipped with photoelectric alarms. Ionization alarms are a big problem." Doug and I had become friends because I went to Julie's funeral 'cause I knew how hard it was after losing a daughter and I knew the journey they were going to go on, and it had been two years since I had lost my daughter. I showed up at the funeral and just stood outside. I waited for the Turnbulls to leave and I asked the

pastor I said, “Could you introduce me? I want to let them know that I lost my daughter at the Ohio State fire and I want to be there for them.” We became friends and that’s why Doug and I, we travel all over trying to spread our story. You’ve know, we feel very passionate about this because we know the misinformation about ionization alarms and the foot dragging that’s been going on for 30 years in the fire industry.

Now, this is what you’ve already heard today and this is very, very typical. Everybody needs a smoke alarm. Everybody needs to maintain it; make sure you have a battery in it, and then sometimes you’ll hear ionization alarms are faster detecting flaming fires and photoelectric alarms are faster detecting smoldering fires, but they never tell you how much. It’s what they don’t tell you that’s the devil in the detail. Ionization alarms are faster in a flaming fire. How much faster? On the average through all testing about 30 seconds; however, most people don’t die from flaming fires in houses. Think about it. Do

you go to bed at night with a flaming fire in your house? Flaming fires are usually caused when people are up and around and activities are occurring. You seldom need a smoke detector that lets you know you have a flaming fire in your house. Most people die at night. We read about it in the paper all the time, and they die from smoldering fires. Now, this whole thing about flaming fires and smoldering fires is a little... I don't like it because there's stages of fires. They all go through stages. You always have some smoke at any point in a fire. An ionization detector has trouble detecting smoke, pure and simple.

Now, this looks like a very busy slide. I'm going to try to go over it quickly to make some sense for it because I heard a lot of information here earlier. At the very bottom; I don't know if you can see the dot; there's an ionization flaming stage; a photoelectric flaming stage. Both of those... both technologies will detect the flaming stage of a fire more than adequately. The problem is as smoke leaves its source it cools, the

particles become larger and when the particles become larger, the ionization due to the technology has trouble detecting it. Ionization alarms are very good at submicron particles, one-third of a micron. Now, the point was brought up about our furniture today. Polyurethanes, when they smolder and they burn, guess what size they throw of particles? Greater than a full micron, too large for the ionization to detect. That's why if you... and you can check this out, and I say this everywhere I present, I will give anybody in this room $50 if you can find anybody that's ever died in a fire with a photoelectric smoke alarm where they blamed that alarm for not sounding. When... and the reason I say that; people tried to take me up on it and when they do the research they find out 100 percent of all lawsuits involved involve ionization smoke alarms because they're faulty. They do not sound in time. Ionization alarms, not only do they not detect flaming visible fire or smoke particles as they cool, they also get disable five to eight times by every research study. So

if you want people to have a working smoke alarm, you never want to recommend an ionization smoke alarm because ionization technology inherently gets disabled because of the problems. Now, the fire that Julie Turnbull died in at the Miami University, two and a half years later after that fire, a story was being done. They wanted to go through the new house that was rebuilt. They had put hard wired ionizations detectors in there. When the press went in there guess what they found? The smoke detectors had been ripped out of the ceiling by the college students because of the nuisance alarm problems.

Now, we were talking about evidence. Well, here's some evidence that's pretty... I think pretty important evidence. This is Consumer Product Safety Commission. Here's over 30 days they studied eight houses with 234 cooking events. To your left are percentages. Ionizations had 6.2, over six percent unwanted activations. The dual sensors, which we heard people advocate for, because they have ionization technology in them, and the

manufacturers are free to set those sensors whatever levels they want, they have the highest rate of nuisance alarm problems. They will get disabled the most. They are almost eight percent, and here's your photoelectric 1.6 percent and I was glad the question was asked by the councilwoman about... to the NFPA gentleman about don't your own codes suggest around kitchens, photoelectrics? They do, within 10 feet. They say photoelectrics from 10 to 20 feet. They want a hush button on an ionization or a photoelectric. The preferred technology is photoelectric, and let me tell you something else. Outside of those areas when you have a fire as smoke travels and rises, ionization's not going to detect it; photoelectric will. Here is the NFPA testifying that 97 percent of all unwanted activations around kitchens are ionization type detectors, so when you're looking at your housing in New York City, if you have a small area you do not want ionization technology to be people thinking that that type of technology is going to save them; that one, they'll get disabled and two, if they actually

have a fire, they are liable to die. Matter of fact, they're likely to die.

Now let's look at some more testing. NIST stands for the National Institute of Standards and Technology, and you can see in most of the tests both alarms activate very close to each other; however, in some of the tests when some of your fires that really have the smoldering stage, look at test three and four; 22 minutes, 39 minutes. The 39 minute was actually a house on the first floor in the living room. There was a smoldering fire in the living room. About 40 feet away down the hall and off there's a bedroom with alarms being protected. The photoelectric sounded 40 minutes before the ionization alarm. This is government testing. More government testing: ASET, a fancy way for saying how fast can you get out of the house before the fire kills you. It's Available Safe Egress Time. Now, here's your flaming test in 2008. You can see the higher number is better, so yes, the ionization give you more time; 52 seconds to 108 seconds, but if you go down and add those seconds up, it's an

average of 30 seconds. The problem is you're getting your smoldering fires. Now, here's... you have a fire downstairs in your... you have smoldering in your living room. Upstairs on the second floor in the hallway are your smoke alarms, a very typical set up. You got 16 seconds to get out of the house. So a family gets out of the house on an average of 16 seconds. Now, if they had... if that family has a couple extra kids or if somebody's extra tired, they're not going to get out of that house. With photoelectric you've got 55 minutes. This is the government testing. You could wake up, hear the alarm, go down and find out what's wrong, put the fire out and not even call the Fire Department. Now, if it happens to be a summer night and your air conditioners are circulating, that 55 minute time gets dropped down to 46 minutes, but you've been dead 54 seconds with an ionization alarm. That's the difference between ionization and photoelectric. That's why 865 is critical that you really understand it. Don't listen to the fact that there's not evidence. The evidence is

everywhere if you look. Matter of fact, that Boston Fire Chief that I was telling you about, when Massachusetts... when Boston was looking to go strictly photoelectric and mandate photoelectric technology, the Boston City Council called in the NIST to testify and within their testimony they admitted that sometimes ionization alarms will not sound at all even when there's a room full of smoke. Let me tell you, Massachusetts since the '90s whenever you had a remodel job, you had to hard wire photoelectric type technology in, and for 20 years in the '90s the Boston Fire Department only passed out photoelectric smoke alarms. It's not only the government that tests this. Texas A&M, University of Colorado State, they did testing for two and a half years on this. They used a testing model designed by Bell Laboratories for the Navy Metamend System. It's called a Fault Tree Analysis. After two and a half years, the type... here's your survival chances: a flaming fire, the blue at the bottom, photoelectric only had a four percent failure rate. You got a 96 percent chance of

surviving a fire. The ionization, because the fact they factor in that people are going to disable their alarms ‘cause of nuisance alarms, you only have an 80 percent chance of surviving a fire. The smoldering fires: once again, photoelectric you got a 96 percent chance of surviving. A smoldering fire with the ionization you got a 44 percent chance of surviving, less than half. Now, this person will be submitting probably the testimony as well, but I’m telling you the fire scientists across the United States that independently do this research unanimously agree that photoelectric is what you have to have. I heard the statement about fire deaths. Well, here’s the actual pie charts on fire deaths. These are everybody that died, but yet had purchased a smoke alarm. About a third of people died that had no smoke alarm at all; they didn’t even purchase one, but if you look over on the green, 37 percent bought a smoke alarm and for some reason the batteries were disabled and they had a fire and they died and the number one reason for disabling batteries, as we all know,

ionization alarms have a 97 percent disable... I mean that 97 percent are the type of alarms that get disabled, and I'm sure in New York 90 to 95 percent of all of you have ionization alarms. Now, you go over to the red. These people, actually their alarms were found to be working, but they died anyway. Why is that? Well, there's a lot of reasons. One, people go back in; tried to save their family; they tried to fight fires. Sometimes people were incapacitated; sometimes they're elderly or young, but an overwhelming factor to consider is when you know that one alarm is a half an hour to an hour better in a smoldering fire or sometimes doesn't go off at all as according to our own government's testimony, you're going to have a significant number of people. So these 2,000 plus people that died, if they had just had photoelectric technology instead of ionization, likely that number would be cut in half.

I want to conclude by talking about Baltimore and Boston. I heard a statement made that they studied this in California, they

studied this in Ohio and they studied this in Maryland. Well, guess what? I testified in California. That committee was made up of... half of the people on that committee were made up of people that had economic interest in the smoke alarms; the other half did not. At the end, they required a two-third vote to get anything in writing. People quit and walked out of the committee and asked for their name not to be put on that of the people that were not part of the... that had... that were part of the fire service industry that did not have an economic gain because the people with the economic gain did not... were pushing an agenda. In Ohio; testified there too; guess what? Nine cities in Ohio went photoelectric. There's a mutiny right now among a lot of people in the Fire Department and Fire Chiefs and firefighters because our State Fire Marshall they thought ran a very poor task force. Nine cities have gone photoelectric in Ohio including my city of the city of Cincinnati, where if you have a rental property it must be photoelectric. Now, in Baltimore the Maryland Task Force. They think a smoke alarm's

a smoke alarm as long as it has an Underwriter Lab seal. They don't educate the public or the difference between technologies. They just want everybody to have a smoke alarm with the UL seal. Baltimore has 600,000 people. Boston; colder climate; 650,000 people with a culture of photoelectric, and we're going to look at the residential fire deaths. From 2009 to 2012, Baltimore had 75 fire deaths. I left Boston blank. Does anybody in here want to venture how many fire deaths they had in a larger city and a colder city of Boston in that same four-year period? Just anybody pick a number. Four. Now, if that's not proof that the technology works, I really don't know what is. I'm going to conclude right now, but if anybody has any questions, I would certainly...

CHAIRPERSON DILAN: Yeah, just on this.

[crosstalk]

DEAN DENNIS: Be happy to entertain it.

CHAIRPERSON DILAN: Just on this, so I thought I heard you say earlier that Boston

mandated the use of this product and Baltimore... what...

[crosstalk]

DEAN DENNIS: Yes.

CHAIRPERSON DILAN: Was Baltimore's status? And Baltimore did not mandate or allow both products?

DEAN DENNIS: Baltimore does not say anything. Baltimore is like New York...

CHAIRPERSON DILAN: [interposing] Like new York...

DEAN DENNIS: City.

CHAIRPERSON DILAN: Like New York City?

DEAN DENNIS: Nobody knows what they have.

CHAIRPERSON DILAN: Yeah.

DEAN DENNIS: Nobody educates or recommends anything.

CHAIRPERSON DILAN: Well, I think ours was clear. They said that both products...

[crosstalk]

DEAN DENNIS: Mm-hm.

CHAIRPERSON DILAN: Are fine, but it's...

DEAN DENNIS: [interposing] Yeah.

CHAIRPERSON DILAN: The market, which is... you know, which I don't have a problem with. The market's the market, but the market...

[crosstalk]

DEAN DENNIS: Yeah.

CHAIRPERSON DILAN: Chose one product.

DEAN DENNIS: Yeah, now what's...

[crosstalk]

CHAIRPERSON DILAN: And that's kind of what happened.

DEAN DENNIS: What's interesting when you talk about the market, I don't know if the gentlemen up here were familiar, but HITA, 100 percent of their new products; their worry-free ranges of alarms only uses photoelectric. I'm not sure if you know this, but First Alert, which is BRK, their newest technology, the ATOM, only uses photoelectric technology. The latest technology out there, which will signal you on

your cell phone if you have a fire, is by a company called Ness. They only use photoelectric technology. The industry is putting all their money in photoelectric technology. When I talk to the people in the industry, I say, “Well, why do you even make ionization alarms anymore?” And they go, “People buy it. There are cities that want both. We’re going to keep making it until... as long as people are buying it.” The photoelectric... ionization technology got here by Seaman’s Corp in the ‘30s. Last year, Seaman’s Corp quit making ionization technology altogether and for their systems they only gave five more years for all the replacement parts, so I’m just telling you that if you want to be cutting edge and progressive you’ll endorse this bill because this bill really... the people have done their homework on this bill.

CHAIRPERSON DILAN: ‘Kay, thanks and you know, thank you for sharing your story with us. It’s a pretty...

[crosstalk]

DEAN DENNIS: And thank you.

CHAIRPERSON DILAN: Pretty intimate story that you shared. It's not often that people come up and share their lives.

DEAN DENNIS: Well, I felt it was very important and I really do appreciate New York entertaining...

[crosstalk]

CHAIRPERSON DILAN: We're...

[crosstalk]

DEAN DENNIS: This.

CHAIRPERSON DILAN: We're certainly sorry for your loss. I just have one brief question.

DEAN DENNIS: Mm-hm.

CHAIRPERSON DILAN: Just aside from your personal experience, which is what you shared with us and...

DEAN DENNIS: [interposing] Mm-hm.

CHAIRPERSON DILAN: Trust me, as a father who would... lost a child, I would imagine that when you decide to dig into something as a result of the loss of your daughter you would dig into it with all your passion.

DEAN DENNIS: Right.

CHAIRPERSON DILAN: But aside from personal, what's your professional experience with this?

DEAN DENNIS: Well, that's...

CHAIRPERSON DILAN: [interposing] And personal's fine, trust me. I'm not trying to...

[crosstalk]

DEAN DENNIS: Okay.

CHAIRPERSON DILAN: I just want to give...

[crosstalk]

DEAN DENNIS: I happened to retire with 35 years and I ran the court system for the Cincinnati Public Schools. When I got onto this I spent 40 hours for six years reading every research report.

CHAIRPERSON DILAN: Okay, so a lot of it is personal and through the experience.

DEAN DENNIS: Well...

[crosstalk]

CHAIRPERSON DILAN: And you know, either way...

[crosstalk]

DEAN DENNIS: Right.

CHAIRPERSON DILAN: It’s fine. I just...

[crosstalk]

DEAN DENNIS: Yeah.

CHAIRPERSON DILAN: If there was I wanted to establish...

[crosstalk]

DEAN DENNIS: No, exactly.

[crosstalk]

CHAIRPERSON DILAN: For the record, that’s all.

[crosstalk]

DEAN DENNIS: And if I really thought...

CHAIRPERSON DILAN: [interposing] Uh-huh.

DEAN DENNIS: The direction to go was dual sensors or a combination, I would say that. I’m all about saving lives. I mean I would not... I don’t want anybody else’s family... I think it’s the cleanest, best way to go, is what’s before you.

CHAIRPERSON DILAN: Alright, thanks. Thanks for your time.

DEAN DENNIS: Mm-hm.

CHAIRPERSON DILAN: And thank you for coming all the way to New York to share your story. We've also been joined by Council Member Rose Mendez of Manhattan, who is here with us and we were joined earlier by Council Member Robert Jackson of Manhattan, who was here with us a little bit earlier.

[Pause]

SKIP WALKER: Are we okay to proceed?

CHAIRPERSON DILAN: Yeah, you can just begin by stating your name in your own voice for the...

[crosstalk]

SKIP WALKER: Yeah.

[crosstalk]

CHAIRPERSON DILAN: Record and then you may...

[crosstalk]

SKIP WALKER: My name is Skip Walker and I'm actually a home inspector from

California, so as kind of random as that sounds and if you're thinking it's a little strange that someone would fly all the way out here to talk about this, my wife agrees with you actually. So the...

CHAIRPERSON DILAN: [interposing] What part of California?

SKIP WALKER: San Francisco.

CHAIRPERSON DILAN: Oh, okay.

SKIP WALKER: So anyway, this came on my radar a few years back when I heard actually a colleague of Dean Dennis's talk at a local meeting. I'm a member of the American Society of Home Inspectors and also California Real Estate Inspection Association. Those are the two oldest home inspection organizations in the United States. They both were founded in like 1976 and they kind of disagree back and forth on what one got founded first in 1976, but the one thing that they agree on absolutely is that photoelectric technology is superior to ionization. Both of them have position statements that say that they support legislation for photoelectric only technology.

These are the two oldest home inspection organizations in the United States and one of the things that we promote is public safety. It is our very firm belief that if we were to switch all the smoke alarms; magically wave a wand and they all changed tonight, that we'd drop the fire death rate in the United States by a minimum of 40 percent. This is like the easiest thing in the world to do; not a lot of money. We're not putting sprinklers in everybody's homes; no new technology. You can buy these things. I bought mine on Amazon and I think I paid about $13 or $14 apiece for them. So it's not a significant investment, but it's a big bang for the buck when it comes to saving lives. We feel that this is important, ASHI and CREIA and myself, because whatever New York City does has implications across the country. I can tell you I've heard a number of people say well, you know, Cincinnati did it; Palo Alto, California did it. Tell me that somebody like New York or New York City did it; then I'll listen. Well, you guys set the tone for what

happens elsewhere. People listen when you guys do stuff.

To kind of get going on the presentation really quickly, the thing that I think is important to understand is the United States from a fire safety standpoint is actually like a third-world country. Our fire safety death rate in the United States is about six times higher than other industrialized nations. So you can see Singapore has about a 2.3 per million fire death rate; Swiss two. We're a 12. Now those numbers change from year to year, but I don't think I've ever seen them lower than 11 for the U.S. Hungary is the only industrialized nation that has a worse fire death rate record than the United States. That's an indictment on what we're doing. If we look at the number of households in the United States that have smoke alarms it's about 96 percent, and all the data I'm using comes from the places that the gentlemen earlier mentioned; NIST, NFPA. I'm an NFPA member. I belong to the International Code Council. I've got five different certifications from the Code Council. I've read all these

reports; UL. You name it; I've read it much like Dean. There are 96 percent of the U.S. homes that reportedly have at least one smoke alarm. About 90 to 95 percent of those smoke alarms are ionization alarms. That's just the way the sales numbers worked out. Ionization alarms tend to be a few bucks cheaper and they were advertised very heavily, so they have the biggest market penetration. If we look at fire death rates from 1977 to roughly 2011; this is a chart that came right from NFPA; what we see is that the number of fires and the number of fire deaths has dropped about 50 percent over that period, which is really good. However, the odds of dying in a fire if a fire occurs over that period of time didn't change much and over that period of time we put in hundreds of millions of smoke alarms in the United States. So if we were putting in a bunch of smoke alarms, you would expect the risk of dying to actually have altered. This is actually one of the things that kind of bugs me the most about this whole thing is we look at the fire death rate... the number of fire deaths that occur in the United

States over the last almost 100 years. Again, you would expect that if we were... if smoke alarms had a direct input into the number of fire deaths; the drop in them, that we would see some change in the shape of that curve when we started putting smoke alarms in back in the ‘70s. In fact, the decline started back in 1918 and has been progressively getting lower ever since, so there doesn’t seem to be a cause and effect with smoke alarms. That, to me, is a red flag and in fact, NFPA says that in one of their reports. Even though we have a significant drop in the number of fires and number of fire deaths, the number... the risk of dying in a fire hasn’t dropped proportionately over that period of time. That’s right out of an NFPA report in 2011. The bottom line to Dean’s point: all fires do not carry the same risk. If we look, cooking or fast flame fires account for about 42 percent of fires. This is NFPA data. Smolder and... but only about 15 percent of deaths, so a lot of injuries with fast flame fires; not so many deaths. If we look at smoldering fires, only about 23 percent of

fires, but 61 percent of deaths and then there's some others in there where they're unaccounted for or they can't identify specifics, so that's when the numbers don't add up. However, time of day, if we look at when the deaths occur, 66 percent of the fire deaths occur between 8:00 and 8:00. That's when people are sleeping. Those are mainly smoldering fires. About two-thirds of fire deaths occur in homes with no functional smoke alarm. Again, this is a CPSC NFPA data, yet 96 percent of U.S. homes have smoke alarms, and about 50 percent of the homes with non-functional smoke alarms cite nuisance tripping as the reason why they disconnected the alarm and we already know that nuisance tripping is almost 100 percent... it's about... it depends on whose study, but the mid-80s to 97 percent of nuisance tripping is attributed to ionization alarms. The other 50 percent have missing batteries, mechanical, electronic failure problems, so there's about a third of fire deaths roughly that fall into that category. If dead batteries are such a problem, then you know, it seems obvious that putting 10-

year batteries in the smoke alarms would be the problem, but to the Chairman's point, if you can't take the battery out, so people simply remove the whole alarm. This is a hard wired alarm. I can show you hundreds if not thousands of photos that look like that from the 4,000 homes that I've inspected over my career and you will find hard wired battery back-up alarms in a closet where they nuisance tripped and people took them down rather than listen to them. You'll find battery operated smoke alarms where people gutted them. They I mean literally ripped cases off of them; everything else where that that same thing occurred; they nuisance trip when they cook, and consequently they remove the alarm. I just did a duplex the other... about a couple months ago where there were four brand new combination alarms; ion and photo alarms. The property manager was really proud of the fact they just put them in 30 days before I got there. When I went through the complex, out of four alarms one was actually still installed and functional. So three out of four alarms were disabled intentionally within

30 days and I asked the tenants why. I didn't you know, beat up on them or anything. It was just, "Tell me about the smoke alarms," and the one guy said, "As soon as we put them up that next... that evening we cooked, it went off and I took it down." That's what nuisance tripping does. As soon as you don't have an alarm, you double your chances of dying in a fire. So here's... they were saying there's no real research on the effect of 10-year batteries. Here is a Center for Disease Control report that says, "Eight to 10 years after installation of lithium power; that's 10-years batteries; smoke alarms the inspectors found that one-third of the alarms were still functional. So at 10 years out, only a third of the alarms can still be expected to be functional. Oddly enough, if you look down on the bottom 34 percent of the dwellings all of the installed alarms in the home were missing, so a third of the population and it this was a fairly large sample. A third of the population didn't have the original 10-year alarms and this was a 10 year study just finished and published in 2010. In the packet I

gave you there's actually copies of my slides so you can actually get the references and look them up if you want. The Dallas Alarm Evaluation also says, "Lithium powered ions are supposed to function for 10 years. It was apparent from our follow up testing that they do not. Although 90 percent of the program houses had at least one working smoke alarm at two years, the proportion was down to 20 percent for the 10 year sample." So in other words, the 10-year batteries don't last 10 years or people disable them. So there's... the point I guess is the 10-year battery tamper-proof stuff is not a panacea and you can't rely on it alone to carry the day and save people's lives.

Here's a letter from BRK First Alert. You'll find that in your package. What it says is... this is a letter to fire officials in the state of Vermont; that First Alert's offering two scientifically substantiated determinations. Photoelectric alarms exhibit significantly fewer nuisance alarms than ionization alarms to silence the triggers, but 22 percent of consumers remove the batteries and

First Alert says, “We support and encourage fire service administration law makers that are moving towards the use of photoelectric sensing technology.” That’s the second largest smoke alarm manufacturer in the United States after Geta, so the manufacturers know. The key to saving lives is in reducing that two-thirds that have the non... fire deaths that have that non-functional alarm. We have to eliminate nuisance trips to do that though, because that’s the only way the alarms are going to stay in place and be effective when they’re needed.

We already talked about what the difference is between ion and photo. Ionization basically is two little metal plates with some radioactive material and the smoke particles essentially disrupt the field. Photoelectric: think of a garage door opener with little beams. The smoke gets in between and it sets them off. So the problem comes to Dean’s point in that the ionization alarms are very poor at picking up the kinds of smoke that occur in smoldering fires. They almost don’t pick it up and both types will actually pick up flaming fires

relatively well, so if we look at ionization alarms, about 90 percent of U.S. installs very prone to nuisance tripping; very slow at smoldering fire detection. The average according to NIST, which is National Institute of Standards and Technology, is 30 minutes and the range is actually 15 to 90. Now, I would ask anybody in this room, including the Fire Marshall that was here earlier, “Are you going to hit the snooze button for 30 minutes if you have a fire in your house or do you want to get out?” These alarms give you less time to get out. They are slightly faster for flaming fires. The average is in the 30 to 90 second range. That may be significant under exceptional conditions, but for the most part you’re going to have proper emergency egress times with both types of technology and fast flame fires. Photoelectric probably five percent or less of U.S. installs, about... virtually no nuisance tripping, about three percent. An Alaskan housing study that I looked at, the only photoelectric alarm that was disabled in that population, and I think they

did like 900 homes, was one where the family took the 9-volt battery out to power a kid's toy. So I guess in an Alaskan winter it was more important to have the kids have a toy that worked than a working smoke alarm, but the bottom line is their average is about 30 minutes faster in smoldering fires. They're only slightly slower in flaming and that average is about 50 seconds and I just want to make sure... oh, I know. The other thing I forgot to mention on the ionization alarms is they will fail about one in five fires outright meaning they never go off. That's a functional alarm not actually functioning. Texas A&M... this is the... me and Dean kind of overlap a little bit on this. They use that two and half year study. I gave you in the packet I handed out the actual report that we referenced and I highlighted the page. That's actually a different one. There's a shorter one there that's Texas A&M, and if you look it'll actually... I tabbed the page, highlighted the data so you can see exactly where I got this stuff from. There's no... I'm not making anything up. The smoldering fires,

the probability of a fatality with an ionization alarm in a smoldering fire condition is about 55 percent, meaning 45 percent of the time that alarm's going to save your life. This is like air bags that only go off half the time when you have an accident. Photoelectric, the probability is only four percent of a fatality, and part of that deals with electronic failure and maintenance issues, meaning again, ions work only about 45 percent of the time; photos work about 96 percent of the time. In flaming fires, we had about almost a 20 percent probability of failure with ionization alarms. That's where they're supposed to work the best. In fact, the problem with that is they take into account the nuisance tripping and intentional disconnect problem. So you can see I think the only one that has a clear advantage and even if you really come down to it, a four percent failure rate in a life safety system is still not really all that good. When you really come down to it that's... but that's the best we have right now. If we look at that one you were just holding up, Chairman, that's a UL study. This is UL running

smoke alarm tests to UL standards. If we look... and I don’t know if we have a... nope, no, sorry. We don’t have a pointer. If you look at the very top, that is the test that you run that a smoke alarm has to actually pass in order to be legally sold in the United States, and that column on the left hand side with the circles, those are ionization alarms being tested and you see DNT means did not trip, so this is a UL test run on smoke alarms where they’re supposed to pass 100 percent of the time and we got a 20 percent failure rate. The only place they were faster was the ionization alarm beat the photos in the burnt bread toast test. They actually burnt toast and found out that it’s not our imagination that ionization alarms are actually faster. Here, they actually ran... and the synthetic materials are not part of the UL tests currently. This was a test to determine whether they should be or not. That column right there is polyurethane foam tests to UL standards, so UL ran the test. What they found is that in seven out of eight tests, that the ionization alarms never went off when they

have tested them to the... this is polyurethane foam like you'd find in a couch or a bed or the chairs you're sitting on. In the one case where the ion actually went off it was 43 minutes after the photoelectric in the same test. In every case all of the tests you just saw the photos went off within standard on every single test. So the only place where we can... where we can make a difference is making sure we keep the alarms connected meaning keep batteries in them, keep them on the ceiling and then give people alarms that actually go off and the only alarm that can do that is a photoelectric. All the data says that. I don't... I... and the data I use comes from NIST, UL, CPSC, NFPA, Texas A&M, you name it. You can take these reports time after time and for the last 40 years they all say the same things. These four states actually have photoelectric technology right now. One of the things that Dean didn't get a chance to, but I know Jay Fleming will, is the...

CHAIRPERSON DILAN: [interposing] What's up with California?

SKIP WALKER: I'm working on them. That's all I can tell ya.

CHAIRPERSON DILAN: Well, is it... Well, is it Schwarzenegger's fault like what's going on?

SKIP WALKER: No, Jerry Brown won't sign a law...

[crosstalk]

CHAIRPERSON DILAN: Oh.

SKIP WALKER: Unless the State Fire Marshall goes for it and the State Fire Marshall it's a political appointee position and she won't. So but anyway, these have it and one of the things that I think Jay Fleming makes the point of is if you look at the fire deaths statistics in Boston in Massachusetts versus Baltimore in Maryland before and after the photo ordinances, before they were very similar and almost as soon as they started to put in photoelectric technology en masse and in Boston the two started to diverge and that's when you see that one per year and 18 per year number that Boston has now. They have the lowest fire death rate in the United States of any major

city barring any size. Ohio we've got eight cities, California's got four. There of them are in my area. Averyana's Law is currently pending in the New York State Assembly. It's in Committee. One of the things they say is Averyana Dale most likely lost her life because the ionization smoke detector that was present in the home that she was in did not alert her in time for the fire until it was too late. That's in the state law justification. So that little girl and her godmother died in a house where they really didn't have to die and this gets repeated every day in the United States over and over again and it is pointless.

The International Association of Firefighters, the largest union representing firefighters in the U.S. and Canada, they got 300,000 members, specifically calls for photoelectric only and they specifically say no combination alarms. Ditto for the American Society of Home Inspectors; ditto for the California Real Estate Inspection Association. I wrote both of those position statements and got them passed. Let's see here.

In closing, I can't make the point strongly enough. All fires are not equal. Two-thirds of all fire deaths occur in homes with no functional alarm. Half of those non-functional alarms are attributed to nuisance tripping. Almost all nuisance trips come from ionization alarms. Of the remaining third only 15 percent of the deaths are actually attributed to flames, which is not to say that those 15 percent are not important people, but the photoelectric alarms would've protected those people in almost all cases. There's never been a wrongful death suit against a manufacturer for a photoelectric alarm, yet there's been many and they've won a bunch of times on ionization alarms. Currently UL is actually named in a lawsuit in Alabama for failure to provide a meaningful testing standard. Requiring 10-year anti-tamper alarms alone cannot fix this problem. If you change to photoelectric alarms at least 1,000 people in the U.S. would not die annually and if you think about it, if the smoke alarm is doing its job and people wake up and they get outside and they call the Fire Department, when the Fire

Department gets there their job then is to pour water on the house that's on fire. They don't have to go inside, so you're actually going to put your first responders at risk less if the smoke alarms actually work. They're not going to have to go in and recover bodies, which is probably what they're going to be doing when they get there on an ionization alarm where there's been a delayed response, and understand no smoke alarm's going to save everybody. It's not possible, but we can do so much better than we're doing right now. I mean what we've got right now is embarrassing I think, because we know the problem exists and we let it exist. You guys have a chance to do something about it and I applaud the council for even considering this. I mean it borders on being courageous and I'm not joking about that. I mean that very sincerely. This is a chance to actually save people's lives and directly and for almost no money. I mean it's just so important. So, that's my... everything I told you is in the packet there. I wrote an article that's in that magazine that you can take a look at. I think

that was handed out to you. My card is on the front of that. If any of you guys have any questions at all, you can call me, you can call Dean, you can call Jay Fleming. We can get the information for you. I mean I can't tell you how much we want to support this because it's that important to us.

CHAIRPERSON DILAN: Yeah, just like I got a fire alert on my phone from Queens so.

SKIP WALKER: Okay.

CHAIRPERSON DILAN: Might be... might be... yeah.

SKIP WALKER: [interposing] Any questions?

CHAIRPERSON DILAN: Yeah, just I wanted to talk to you about something that hasn't been brought up and it just will help me understand what's going on in the private sector a little bit, and that's market penetration of the two opposing types of products. Why...

SKIP WALKER: [interposing] Why?

CHAIRPERSON DILAN: Yeah, why? Is it because...

[crosstalk]

SKIP WALKER: Well, it's...

[crosstalk]

CHAIRPERSON DILAN: This is a newer product and that's why?

[crosstalk]

SKIP WALKER: No, actually they've both been around for about the same amount of time.

CHAIRPERSON DILAN: Okay.

SKIP WALKER: The ionization alarms were the first one developed that could be powered for a year by a 9-volt battery. The early photoelectrics actually used little light bulbs and they couldn't keep them powered for a year off a 9-volt battery, so it wasn't until they invented LEDs that the photoelectrics became popular and that was back in the '80s. By then, the ionization had a big share of the market. The other thing is you can find ionization alarms very cheap. I mean I got... actually I'll show you a box that's two for $8 at a Lowe's store near where I live, so for $4 apiece you can put smoke alarms in. They're ionization alarms, they don't have hush buttons,

but they say they're smoke alarms and they meet the UL 217 standard. The cheapest photoelectrics I've found are at Costco and those were two for $23, so about 12. If you're a landlord and you've got... you're looking at a wall of smoke alarms and they all say they're smoke alarms and they all meet the legal requirement, are you going to put in the $4 one or are you going to put in the $12 one?

CHAIRPERSON DILAN: So it's pricing.

SKIP WALKER: It's a pricing issue.

CHAIRPERSON DILAN: A pricing issue.

SKIP WALKER: And my point is this... we're not talking... this is not college English class, okay? You know, you get a 45 on the test, you don't pass, but you can take a make-up test.

CHAIRPERSON DILAN: So another question on market. Has... is there anything where any independent home insurance companies give an opinion on one product versus the other?

SKIP WALKER: No, they don't get involved in it.

CHAIRPERSON DILAN: They don't.

SKIP WALKER: I... I... and I... I...

CHAIRPERSON DILAN: [interposing] I mean if..

[crosstalk]

SKIP WALKER: This is... anecdotally...

[crosstalk]

CHAIRPERSON DILAN: If you...

[crosstalk]

SKIP WALKER: This is what I heard.

CHAIRPERSON DILAN: You would think if one product is more susceptible...

[crosstalk]

SKIP WALKER: You would think.

[crosstalk]

CHAIRPERSON DILAN: To save that they would get involved.

SKIP WALKER: You would think and here’s what I... I know a gentleman who is actually... NFPA 72 is the committee that actually writes the smoke alarm standards in terms of audibility and actually deal in there with your concern over hearing impaired

individuals or sight impaired individuals; that's actually all in NFPA 72. He sat on that committee and one of the things he said that for me was a complete eye opener, was he said the insurance companies don't really have a big interest in reducing the fire death rate because as sick as this sounds, as long as there's a high risk they can charge more money for premiums. I mean that's a guy that's sat on an NFPA 72 committee saying that and it really kind of turns my stomach 'cause that's not the way I'm wired, in case you haven't figured it out.

CHAIRPERSON DILAN: Yeah, well, I would think...

[crosstalk]

SKIP WALKER: But I can... I can...

[crosstalk]

CHAIRPERSON DILAN: I would think it should turn theirs too. I guess if there's... if there's more prevalence to damage towards property and not life, I'm sure they would then get involved.

SKIP WALKER: Yeah, yep.

CHAIRPERSON DILAN: And...

SKIP WALKER: Yeah, so anyway, any other questions?

CHAIRPERSON DILAN: It...

[crosstalk]

SKIP WALKER: If you... like I said, we're...

[crosstalk]

CHAIRPERSON DILAN: Yeah.

[crosstalk]

SKIP WALKER: We're available. This is so important, I just can't even... I can't...

CHAIRPERSON DILAN: [interposing] That answers the question and I... what... what we do... we've thought of a few steps that we can take to kind of independently verify all this because this is relatively new to me. Council Member Crowley brought this to my attention about three or four months ago. We're going to take those steps and then reach back out to the Fire Department and have a real conversation with them.

SKIP WALKER: Yeah, one of the things I will... I can't say strong... everything you saw on those slides is all

derived from publicly published vetted information. I didn't use anything that came from Joe down the street. It's all NIST, NFPA, CPSC, Texas A&M, all reputable sources. If you look at the article I wrote for the ASHI Reporter a few months back, at the back end of that everything is footnoted. I wrote that paper just like it was a college research paper where I would have to... because I knew it was going to be read by people that were going to try to punch holes in it, so I didn't want to leave any wiggle room in there for them. So you... I gave you copies of some of the stuff so you can actually go back and read it for yourself. You know, I mean there's nothing to hide here. I don't have any financial gain in this. As a matter of fact, it cost me two days worth of business; I'm self-employed; to come here to talk for this 15 minutes, so...

CHAIRPERSON DILAN: [interposing] We certainly... certainly...

[crosstalk]

SKIP WALKER: I... it's that important to me.

CHAIRPERSON DILAN: Certainly appreciate that and we thank you for your time and your testimony, and then maybe we can get California up and running. Okay, so last we have Russell Ashe.

[Pause]

CHAIRPERSON DILAN: Yeah, he'll distribute it. We actually wanted the PowerPoint, so thanks. Williamstown, Vermont. Yeah, how far is that from Keene? Is that far from Keene? Yeah. [background voice] I played baseball in Keene when I was younger.

[Pause]

CHAIRPERSON DILAN: Okay, so you're kind of far away then. [background voice]

[Pause]

CHAIRPERSON DILAN: Well, thanks for coming all this way. Were you a firefighter?

RUSSELL ASHE: 23 years.

CHAIRPERSON DILAN: 23 years?

RUSSELL ASHE: Still...

CHAIRPERSON DILAN: [interposing] Okay.

RUSSELL ASHE: Still doing it.

CHAIRPERSON DILAN: So even though I said your name, if you could say your name in your own voice and then you can...

RUSSELL ASHE: [interposing] Sure.

CHAIRPERSON DILAN: Get into your story.

RUSSELL ASHE: Sure, my name... well, let's get to the first slide there. My name is Russ Ashe. I'm from... I live in Williamstown, Vermont; 12 years on the job in Barre City, Vermont in the Career Department; currently still working with the East Montpelier Fire Department and a volunteer in my community in Williamstown. I've been doing it 23 years. My testimony's going to be a little bit different than the last two in that I don't have the figures from NIST and I don't have the figures from UL. What I have is the figures from living it, and so the story I'm going to share with you guys really is exactly what they have been telling you, only I was fortunate or unfortunate depending on how you look at it, to actually experience myself. So at the time of the fire that I'm going to tell you about I was

a Lieutenant with the City of Barre Fire Department; 18 full-time members; Local 881. The population in our town was 9,600, and I know that's a drop in the bucket if that to you folks here. We worked in four shifts. That's 24-hour on and 72 off. I mean we ran it in a paramedic level. December 17th, 2005 is what got us started and I don't think that it's going to work on this PowerPoint... on this projector, but essentially what happened is that just before 6:00 in the morning, we got dispatched to a fire; a second-story fire; a duplex; two apartments, one on the top and one on the bottom. The fire was up on a top floor. The apartment had several occupants; four kids, three adults. The call... the fire was reported by one of the adults who was a friend of the family that was staying there that night, and has fallen asleep on the couch in the living room. The kids were in their beds; the parents of the kids were in their bed as well. We got arrived on scene and had heavy fire coming from their apartment. We had significant water issues that morning. We had some... we had four

guys that made entry without hose lines. Initial report was that there was four kids trapped inside. As it turned out there was four kids and two adults still inside. We had four guys that went inside; made entry without any hose lines. They almost... they almost got caught in the flashover. Long story short is that we were able to rescue the father out of a second-story window, which I'll show you in a minute. We were able to rescue all the children; however, they all died later at the hospital. The mother was not able to be rescued for she was found near the seat of the fire, so she just was... there was nothing that we could do for her. Long story short we lost four kids and their mom. This is a picture of the house, Eastern Avenue. As you can see, the top of the house is where the fire was. The house is split in half top to bottom, so the top is one apartment and the bottom's down is another apartment. Seven people in the home at the time of the fire. One adult male was able to escape by reportedly jumping out one of those second-story windows. We... fire crews... we rescued

four children and the father before the house was consumed by fire. At the end, four children and the mother died from smoke inhalation. This is a picture of the back of the house. This is where we actually made entry first. The porch on the right is where fire crews made entry first. As you're going from the porch to the left on the top, the first window you come to is going to be where the girls' room was and the window all the way to the right is where the adult male was rescued down a ladder. Actually, the fellow pictured in the picture on the ground, his name is Jeff Cochran and he was actually the fellow that carried Art down the ladder. This is a picture from the porch looking into the house. In the foreground is going to be the kitchen. In the background as you're going kind of at a diagonal you can see the kind of an outline of a gentleman in an archway right there. That's going to be the living room area. There's a couch against the back wall that I'm going to show you here in a moment. That's where the fire started. So if we went back to that picture or the first

picture I showed you where you saw the flames, the two windows with the heavy damage, that room right there where the living room is, that's the room where you saw most of the damage. After you get to the archway, it then goes into a dining room area. There was a Christmas tree in that area and then all the bedrooms were off of that area right in there. This is a picture of the girls' room. As you can see heavy damage; heavy fire damage, but not so much inside the room itself. Those are bunk beds. Those are sheets and pillows and no damage to those whatsoever. Smoke damage, but no fire damage. This is a picture of one of the boy's room, Brett's room. The... what I'm really trying to show in this picture here is the lack of any fire damage. There is no damage in there whatsoever, and the only damage right here is this door here separates Brett's room from his parents' room and you can see on the top of the door jamb there some smoke. That's the extent of the damage to his room; however, he was found in his room deceased. This is where the fire started. That right there on the right is

what's left of the couch. The investigation determined that it was one of three things: smoking material, Christmas decorations or an unattended candle. This is where the fire started. The fellow that got out on his own that reportedly jumped out of a second-story was asleep on this couch. He woke up when... he woke up when this couch and everything around him was on fire including his butt. That's what woke him up, and then he tried to wake everybody else up. Everybody else woke up in the home to his screaming. No smoke alarms going off in this apartment whatsoever. There was a home inspection. The City of Barre had just recently put in a home inspection program where they were going through all the rental units inspecting the homes and this was one of them that had been inspected. This apartment and the apartment below it both had three working ionization smoke alarms, all hard wired. The bill you guys were talking about this morning, hard wiring in smoke alarms, this apartment had them, all three hard wired ionization working smoke alarms and none of them went off. So the investigation found

according to the male survivor, the smoke in the apartment was so heavy he was forced to jump from a second floor window. That's right after he woke up. He knew... again, he woke up because the couch he was sleeping on was on fire. He woke up to that. The male victim that escaped reported that he heard no smoke detectors going off while he was in the apartment. The apartment had three hard wired ionization smoke detectors, one in the master bedroom, one in the girls' bedroom and one in the main family room. The main family room's going to be right off of where the couch was. All smoke detectors on the first floor were found to be in working order by firefighters after the fire was extinguished. I can tell... I can attest to that because I'm the firefighter that tested it. When the fire was out, I went down to the downstairs apartment and I tested all the, you know, smoke detectors downstairs. They were still there. Now, remember, we fought the fire on the second floor, so everything from the second floor came through the floor and into the first floor, so the ceilings were coming

down and there was water pouring through the ceilings. One of the detectors was just hanging by its wires, but they were all still there. I pushed the test buttons on all three of them. All three of them worked. Before the Fire Department got there, the Police Department got there first, Roland and Henry, and they were the first ones there and they couldn't get into the fire apartment 'cause the thing was rocking. They couldn't get in, so they went down to the downstairs apartment and they made entry into the downstairs apartment thinking that as Roland said, "If we could've heard something above us, then we could've let you guys know when you got there." Well, they don't... not only didn't hear anything, but they weren't able to stay in there very long because the smoke inside that downstairs apartment was so thick that they couldn't stay in there. They couldn't breathe. They had radio traffic from them to dispatch while in that downstairs apartment and they... where they said that they couldn't stay in there because the smoke was too bad; they had to leave. The smoke alarms in the downstairs

apartment were not working. They did not make a sound. They... the police officers told us that. The radio traffic that they had that's recorded heard no sounds of any smoke alarms going off. They just weren't going off, but the guys couldn't stay in there because they couldn't breathe 'cause the smoke was so bad. And finally, the apartment had passed the City Minimum Housing Inspection only a few months before this fire. As I said, when they tested the smoke alarms everything tested fine, three hard wired ionization smoke detectors. So what happened? Why did the alarms not go off? Well, I and everybody in my department, and I would attest to probably most firefighters in the United States up until this fire had never heard of anything called this photoelectric, never heard of it; should. Every October they expect me to go do fire prevention to teach your kids, who then come home and tell you guys how to be safe in a fire. I'd never heard of a photoelectric smoke alarm before. I got a college degree in fire science and never heard of a photoelectric smoke alarm before. Six

months after this fire, my... the fellow on the left here is my Chief, Peter John. He went to a seminar in a town close to us in Randolph where he met Jay Fleming, the Deputy Chief from Boston, and Jay Fleming told him about the photoelectric smoke alarms and gave him a stack of papers this thick. He said everything we know is right here. He came home from Randolph and we were just wrapping up from a small kitchen fire, and he pulled me off the scene and told me that he knew why all those people in that fire died and he was trying to... he was so wrapped up about it and he was trying to give me this paper while in the middle of the operation, so we... you know, after he calmed down, we figured we'd do it later. What I didn't mention to you is that the fire that killed those kids and that killed Kimberly, the mom there, is his nieces and nephews. That's his... Peter John, the Chief. That's his family. Art, the fellow that we rescued and has since survived is Peter's nephew. So it was his family. So we got 18 guys on our entire department. You guys don't have 18 guys in one house here in New York

City so I don’t know if it’s hard... it might be hard for you guys to comprehend, but 18 guys in our entire department, so our department’s pretty tight. We’re pretty close. Our Chief’s family is what we just responded to, so it really hit us all hard. But, so he went and he learned about photoelectric smoke alarms and so then... and this is another video that we’re going to be able to play for you because I’m just not able to, but what I found that night is I found a website in Australia, and who I believe has submitted some testimony to you guys or I heard that he might’ve, and in that website we found this fellow do this aquarium test where he put a piece of foam from a couch; a chair just like you guys are sitting on right now and he put a soldering iron into it, put an ionization in there, which is what you use on top, and filled the thing full of smoke and the thing... and the ionization alarm never went off. So then he takes a photoelectric and puts a photoelectric smoke alarm in there; it goes off right away. So if we were able to play this video what you... and if you go to

barrecityfire.org so if you... you could find that pretty easy, barrecityfire.crg and you could see this video for yourself. What you would see with this video is that the smoke in that chamber gets so thick that you can only see the front of that ionization smoke alarm, and it is at that point that that smoke alarm goes off. It doesn't go off before. You can see through it, but until you can almost not see that smoke detector, that's when that alarm goes off. Again, barrecityfire.org you can see that it's there online. So we submitted this to UL. We called UL. We called USFA and we called NIST. We called all those guys, and of them said to us you know, that's very interesting, but what you guys are doing is not scientific; doesn't matter, sorry. Thank you. Have a nice day. So we went and this is what they said; the fish aquarium was not a real representation of a real house fire. So we did, we went to a real house. This was an abandoned house we had in Barre City, and what you see in the back is a couch, a normal every day couch that everybody has in their home right now, and we took this home and

we corded it off into just two separate rooms so we plasticked it off so the smoke that we generated stayed in that area and we put a soldering iron in the couch and we put several ionization and photoelectric smoke alarms in both rooms; some in the first room; some in the second room; put different things. One was a photoelectric CO, one was a photoelectric ionization; one with just straight ionization; some were just photoelectric and this is what we found from top left to the bottom right: the first detector went off at 11 minutes and that's what the room looked like. At 11 minutes the first photoelectric alarm went off. In 15 minutes the second one went off. These are... and these detectors are in the room where the couch is. In 23 minutes the third photoelectric went off. In the third picture you can just start to see some smoke coming off the couch. In the first two pictures if you come right up and get right up close to it you might see some smoke, but I submit to you you don't see any smoke. In the fourth one the photoelectric in the farther room went off, and up until this

point no ionization alarms had gone off, none. In the bottom middle picture an hour after we started to test, the very first ionization detector went off in the room where the couch is. It beeped four times and then shut off at one hour. At one hour and six minutes, the bottom right hand picture, it went off and continued to go off. Now, you take a look at that picture. That is a house. That is not a fish tank. That is a real representation of a real fire in a real house. I don't know what the rules are in scientific labs, but, you know that's what I see every single day. That is a real couch in a real house really on fire. I don't know how you can test it any better than that. That's what the conditions in that house were like when that ionization detector in that room finally went off. Now imagine that at 2:00 in the morning. I heard you mentioning you have kids. Studies say that kids don't wake up to smoke detectors. They can go off all night long and they won't... they don't wake up.

CHAIRPERSON DILAN: I might not.

RUSSELL ASHE: Yeah.

CHAIRPERSON DILAN: Yeah.

RUSSELL ASHE: Well, if this is the condition in your house, sir, when your alarm goes off, I submit to you you won't wake up. Alcohol-free or not, I submit to you you will not wake up 'cause you're already dead. We're wearing air packs in that environment right there because you can't breathe. That's when the alarms finally went off. So is there... is there flames going on right there? No, there's no flames and I don't know how much longer it would have taken for that to have developed into flames, but it doesn't matter. You're already dead. You're already dead at one hour and six minutes. The side by side view top left is when the first photoelectric went off and bottom right is when the first ionization went off. Again, a real house; a real couch; a real fire. That's not a laboratory. That's not pine needles. That's not you know, UL supervision. That's real life, gentlemen, and that's what I go to every single day. That's real life and the fire that we had three working ionization smoke alarms, the bottom right hand picture.

That right there is why those kids died. That right there is why they died, and that right there is why when you go and you pass this bill you're working on for photoelectrics, that right there is why kids in your community won't die.

So in 2007, 2008 we started working on a bill with the legislation in Vermont and in 2008 then Governor Douglas signed into legislation a law in Vermont and that requires photoelectric only smoke alarms in all residences and eventually the committees created real changes so that now rental units have to be the same way. Vermont does not prevent you from putting in ionizations. They don't stop you from doing that. All they say to you is that you do what you want, but there has to be a photoelectric only smoke alarm, not a combination, but photoelectric only. Why? Because as you've heard a thousand times, even from the first group that talked, ionization smoke alarms are prone to nuisance alarms. So you take an ionization smoke alarm that's prone to nuisance alarms, which is why people disable them, and put it in the same unit as a

photoelectric, what's the difference? You're still going to have the nuisance alarms and the photoelectric alarm is great, but because of the nuisance alarm, people are going to disable that anyways, and sir, you were absolutely right. A 10-year lithium battery they can't take out. Those alarms are going to come off... the whole unit's going to come off the ceilings. You're absolutely right. That is what is going to happen.

CHAIRPERSON DILAN: Yeah, I think what...

RUSSELL ASHE: I'm sorry?

CHAIRPERSON DILAN: What disturbed me was that our Fire Chief seemed to not get the point that I was trying to make and that was the most scariest...

RUSSELL ASHE: What's the...

[crosstalk]

CHAIRPERSON DILAN: Scariest...

[crosstalk]

RUSSELL ASHE: What...

[crosstalk]

CHAIRPERSON DILAN: Part for me, but, I don't... he answered the question at least.

RUSSELL ASHE: I have an opinion I'll reserve to myself, but you are absolutely right. Your point was dead on. And again, May 2008, this was Governor Douglas at that time signed in the alarm. I'm going to wrap this up real quick. 23 years of doing this, I can't tell you how many times people have come up to me and thanked me and blah, blah, blah and any other public servant does the same thing, but in this particular scenario what we're talking about you know, people like me, people like you, you're not the heroes, we're not the heroes. I would like to introduce you to a few of them, however. Bradley Mercer, Davenport, Iowa on January 18th. His parents had just put him and his brother to bed and they were downstairs watching T.V., and his mom heard a thump upstairs above them and when his dad and mom went upstairs to see what the thump was they found that his bedroom was on fire. Turns out that his... I believe it was his baby monitor

had short circuited and set the bedroom on fire. The mom and dad couldn't get up. The dad had to go in through a wall in another apartment to get through and was able to rescue one of his boys. The Fire Department showed up and was able to rescue the other one. Bradley finally ended up dying. That apartment was outfitted with working ionization smoke alarms that did not go off. They sued BRK and won for millions of dollars, but BRK has filed an appeal and so currently it's in the appeals. Rotterdam, New York, Bill Hackert and Christine Hackert, they both died in a house fire here in New York with working ionization smoke alarms that did not sound. Waihi, New Zealand, these are five kids, all from one family that died in a house fire; again, working ionization smoke alarms that did not go off. This is the fire that Dean told you about. Andrea and four other kids in an off campus fire protected with working ionization smoke alarms, some of them disabled because of the nuisance alarms. When somebody says to me, "Well, you can't blame the alarm because they were disabled." Well, why do you think it was

disabled? Because it's a nuisance alarm. They didn't disable it because they didn't like the look of it. The thing's going off when they're cooking and taking a shower, so they disabled it. Well, they disable it and it doesn't work. Scotchtown, Tasmania, four kids. These four kids showed up for a sleepover. They died in a house with working ionization smoke alarms that did not work. Miami University, Doug Turnbull, the fellow that's been working with Dean quite a bit, three kids died in a house fire. I believe it was 17; if I remember; 17 ionization smoke alarms in their home that didn't go off. Just recently Averyana Dale and her godmother died in a house fire here in Auburn, New York, two years old. She's the motivation behind Averyana's Law, which I'm sure you folks have heard about. My fire: Brett, Tory, Christa, Kim and Mikayla all died in a house fire with three working hard wired ionization smoke alarms, and here they are from left to right. I'd like to introduce you to them. That's Brett on the left and the first girl you see that's Mikayla. The man up there, that's Art; his wife, Kimberly and then the last

two girls Christa and Tory. I found the girls and during the search I helped rescue Art. I found the girls. I did not find Brett. I carried Christa out of her room; passed her onto another fireman. Another fireman grabbed Mikayla, handed Mikayla to me and I carried Mikayla down the ladder and when I got down to the bottom of the ladder, Tory was being held by another firefighter. We're a small community. We don't have the availability of ambulances like you folks do here, so our ambulance system was strapped from the very beginning, so I spent 15 minutes on the sidewalk doing mouth-to-mouth with Tory there. Kimberly, she unfortunately was found near the seat of the fire, so she was dead and Art, we rescued Art down the ladder. Art has since recovered. He's remarried his high school sweetheart and for the grace of God has a daughter now. Brett was rescued by another friend of mine. He passed away as well.

These are my heroes. These are my personal heroes. I know these kids personally. I want you to... in closing, before... if you guys have any questions for me in closing, I

would like you to take... to take... if you remember the first picture I showed you where I said here's a picture of where we made entry to the forefront was the kitchen and then the picture of the gentleman in the background that was outlined. Do you remember that picture? Well, take a look at this picture right here. This was in their apartment. This is the archway that I was telling you about. The forefront is going to be where the couch was that started on fire. The back is going to be the room where all the bedrooms were off of. This picture was taken shortly before the fire and that's what was left of it. Where that gentleman is standing right there, the outline, that's where that picture was taken from and that's what's left. So with that, gentlemen, if you have any questions, I'm happy to try to answer them.

CHAIRPERSON DILAN: I just have one. I asked questions earlier about the market and I guess you, I'll ask you about the product. I don't know how well you know the product or not, but why... I mean each one of you gentlemen that

have come forward and have pitched the photoelectric why does it perform so much better in the smoldering fires as opposed to... what's the reason? What's the difference in technology?

RUSSELL ASHE: I'm going to try...

[crosstalk]

CHAIRPERSON DILAN: What's...

RUSSELL ASHE: And I guess you guys can jump in, but I'll try to...

[crosstalk]

CHAIRPERSON DILAN: Just as best you could.

RUSSELL ASHE: I'll make this as lean... I'm a fireman, which means I don't listen to scientific garbage.

CHAIRPERSON DILAN: Yeah, I understand that.

[crosstalk]

RUSSELL ASHE: Come down to my level and I can understand, you know?

[crosstalk]

CHAIRPERSON DILAN: Yeah, yeah.

RUSSELL ASHE: So that’s what I’m going to try to do. They work differently. Ionization smoke alarms have two thin metal plates that have radioactive material that ionizes the area in between those two metal plates. They’re very close together. When smoke comes in between those plates, it disrupts the current and sets the alarm off. That’s one. Photoelectric has essentially a T with a beam of light that goes across. At the bottom of that T is a photosensor. When the smoke enters that chamber, it disrupts that light beam, hits the photosensor and causes that alarm to go off. So, essentially the photoelectric is really the only alarm that sees smoke. The ionization alarm does not see smoke. It sees very small particles. Smoke works just like water. Essentially the properties are the same. Explain to me, sir, what’s the difference between water that comes out of your shower in the form of steam or the water that is in this glass right... this cup right here. What’s the difference?

CHAIRPERSON DILAN: One is hotter than the other.

RUSSELL ASHE: The temperature.

CHAIRPERSON DILAN: Yeah.

RUSSELL ASHE: Exactly. This is colder than the steam. The steam expands roughly 1,700 times... 1,700 to one when it converts to steam. The particle sizes are very, very small, whereas here, the particle sizes are much bigger. It's still water, but it's in a different form. It's still water. Now as that steam goes away from the heat source, it's cooling down. Those particle sizes are now combining with each other getting bigger and bigger and you'll see it on your windows or on your wall until it turns back to water, 'kay? As it cools off, the particle sizes get bigger, so the hotter the water, the smaller the particles. The colder the water, the larger the particles. Smoke works exactly the same. The hotter the smoke, the smaller the particles. The colder the smoke, the larger the particles. Small particles get between those two thin metal plates very, very easily, so when you have a

flaming fire with hot smoke it sets off those ionization alarms like magic.

CHAIRPERSON DILAN: Got it, okay.

RUSSELL ASHE: Cold smoke, those particle sizes are much bigger. It's like you can't fit enough of those large particles in between those two metal plates to make that thing go off. You could charge this room up so bad that you couldn't see this... your hand like here and have this room full of ionization smoke alarms and not a one of them will go off.

CHAIRPERSON DILAN: yeah, I guess that...

[crosstalk]

RUSSELL ASHE: Not a one.

CHAIRPERSON DILAN: That was about as layman as you could put it I think.

RUSSELL ASHE: One...

[crosstalk]

CHAIRPERSON DILAN: Yeah.

RUSSELL ASHE: Two 55-gallon drums, both with the tops and bottoms cut off; one filled with sand; one filled with softballs, okay? The sand represents the ionization, the

hot smoke, okay? The particles sizes are small. The softballs represent the cold smoke. The particle sizes are bigger. Take a garden hose. That represents the electricity in the ionization smoke alarm, ‘kay? Pour it into the... pour it in the 55-gallon drum of sand. That sand, because those particle sizes are too small, so small it disrupts that flow of water enough to set off the alarm. The water doesn’t flow through. The sand is stopping that current. Put it into the 55-gallon drum with the softballs. You can’t put enough softballs in there to stop that flow of water. It’s just going to pour right through, so that alarm will never go off. That’s why an ionization alarm does not work with cold smoke.

CHAIRPERSON DILAN: ‘Kay, alright, looks like I got some research to do because it’s pretty tough when your own fire professionals don’t come forward and make a decision on the type of apparatus that’s best. I’m not saying that they don’t or don’t... they don’t have different opinions, but it just

leaves me with more work to do on it, but you've definitely piqued my interest in it.

RUSSELL ASHE: And when the United States government has organizations like NIST, UL, the manufacturers and stuff that are saying one thing, it's extremely hard to be able to quite frankly, stand up on your own two feet and make a stand sometimes, and I'm not really passing judgment on anybody...

CHAIRPERSON DILAN: Yeah, I didn't think you were.

RUSSELL ASHE: but that's what we did.

[crosstalk]

CHAIRPERSON DILAN: It's the politics of it. That's what makes it hard...

[crosstalk]

RUSSELL ASHE: But...

[crosstalk]

CHAIRPERSON DILAN: To do, yeah.

RUSSELL ASHE: And we pretty... we had some strong words for the politics in Vermont and because of that we passed legislation that is saving lives today.

CHAIRPERSON DILAN: I think I couldn't think of anything non-political as saving somebody's life in a fire, so...

RUSSELL ASHE: well, the last thing I'll say to you, sir, is that you know, I get those fire alerts on my computer all the time. I hear about people that are dying every single day, and every time I hear about that I know that in many of those cases the people that I'm reading about that are dead died because they didn't know what I know and it hurts. It's hard to deal with.

CHAIRPERSON DILAN: Well, I didn't know.

RUSSELL ASHE: It's...

CHAIRPERSON DILAN: I... I didn't know and I got to imagine that the majority of the people in this city don't know the difference between the two types of... and I didn't know until I had a...

[crosstalk]

RUSSELL ASHE: Some...

[crosstalk]

CHAIRPERSON ASHE: Conversation.

RUSSELL ASHE: Somebody somewhere is going to die tonight because they don't have photoelectric smoke alarms. You can take that to the bank. Somebody tonight somewhere is going to die.

CHAIRPERSON DILAN: I certainly hope not, but let me ask you another question as a...

[crosstalk]

RUSSELL ASHE: Sure.

CHAIRPERSON DILAN: Fire... as a firefighter, have you done... have you guys done any outreach to any other firefighter organizations or firefighters unions?

RUSSELL ASHE: Being in the National Association...

[crosstalk]

CHAIRPERSON DILAN: About...

[crosstalk]

RUSSELL ASHE: Of Firefighters took a stand, not just because of us, but in part because of us. We've been out to several Fire Departments in Vermont. Vermont's changed a lot. We've been to New Hampshire. We've helped Dean and Doug out in Cincinnati and Columbus.

We've been to Las Vegas, just recently came back from Australia, and as... you know, as was mentioned earlier you know, this is huge financial burden to... nobody's getting paid to do this. It costs us, what, for you and me 800 bucks just to be here, which we're happy to do, but you know, it's certainly financially rewarding. It's financially draining.

CHAIRPERSON DILAN: Yeah, I would imagine.

[crosstalk]

RUSSELL ASHE: But it's you know, 800 bucks, but if somebody gets to go home and see their kids tomorrow morning, it's money well spent if you ask me.

CHAIRPERSON DILAN: Okay, thanks. Thank you for your time. Thank you for coming all the way to New York City. We certainly appreciate it and while in my tenure here, we have term limits in New York City, I certainly have about two months left to deal with this, but Council Member Crowley, who is the lead sponsor, will be returning in January, so if nothing gets done in this legislative session,

the chances are that Council Member Crowley will still be back and will have a chance to do that, but if I could I'm going to look into this and if we can find a way to do it I'm going to try to do that.

RUSSELL ASHE: And I'm sure I'll speak for everybody that was here if there's anything that we can do, at the drop of a hat we'll do it.

CHAIRPERSON DILAN: Okay, thank you. Appreciate that.

RUSSELL ASHE: Thank you.

CHAIRPERSON DILAN: Thank you for your time and testimony. At this point, we have a lot of testimony that will be submitted for the record as if it were read in full that we're supposed to mark up at the top so that... oh, okay, got it. Testimony from First Alert BRK and that will be entered into the record as if read in full. Testimony from Valerie Rivett [phonetic] and that will be entered into the record in full. This is actually from Auburn, New York. From Safe kids... safekids.org that

will be entered the record in full and that's on Intro 1111 only.

[Pause]

CHAIRPERSON DILAN: From the National Electrical Manufacturers Association and that's on 865-A only.

[Pause]

CHAIRPERSON DILAN: From Richard Canta [phonetic], CCP on 1111 only or on both items, 1111 and 865. From...

[Pause]

CHAIRPERSON DILAN: Is that right? I think that was right. From a Mr. R.M. Patton, who is a professional engineer and investigator on this subject and it appears to be on 865. He doesn't reference, but just by looking at it closely it appears to be on 865. From Vyto Babraukas, PhD and...

[Pause]

CHAIRPERSON DILAN: From an organization called Fire Science and Technology; doesn't immediately reference the bills. We'll look through it to determine which ones he's speaking on. From the Northeastern Ohio Fire

Prevention Association and again, this one doesn’t immediately reference the bill. We’ll look through to determine. From John Fleming Deputy Chief of the Boston Fire Department on both items and his testimony will be entered in the record in full and I believe that is all. Is that correct? Okay, with that, all legislative items on the calendar today will be laid aside and that will conclude this hearing.

[gavel]

C E R T I F I C A T E

World Wide Dictation certifies that the foregoing transcript is a true and accurate record of the proceedings. I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

Date

____11/05/2013_____