NATIONAL FIRE PROTECTION ASSOCIATION

TECHNICAL COMMITTEE SESSION

MORNING SESSION - 8:03 A.M.

WEDNESDAY, JUNE 15, 2011

BOSTON, MASSACHUSETTS

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NFPA ASSOCIATION TECHNICAL MEETING

MR. MCDANIEL: Good morning, ladies and gentlemen. I'm Daniel McDaniel. I have the distinct pleasure and privilege of being a member of your Standards Council. I now declare a forum exists and convene the 2011 Association Technical Meeting.

To assist me is Linda Fuller of the NFPA staff who is serving as the staff coordinator; and I also would like to introduce Amy Beasley Cronin, Secretary of the Standards Council; Jim Pauley, Chair of the Council; and Maureen Brodoff, NFPA general counsel. This section is being recorded by Leavitt Recording and Company. It's specifically Ruth Hulke and Elaine Buckley.

First, let me address the safety issues. Let's take a minute to note the exits from this room.

Now that you have noted the closest exit to you I would like to inform you that the fire alarm signal at the Boston Convention Center is a long tone followed by four beep tones repeated over the public address system with flashing strobe light. Do not use the elevators. If you are a person with a disability who has not already made arrangements with NFPA for emergency evacuation, please see someone at the Registration just outside this

ballroom.

As with any organization, we have certain rules and protocols. First, uses of video and/or audio recording devices of any type are not allowed during the Association Technical Meeting. I would like to call your attention to the Guide For the Conduct of Participants in the NFPA Codes and Standards Development Process. As a participant in the process, you should be familiar with this guide. I would also like to call your attention to the NFPA Convention Rules which set the process to be followed today. Copies of both documents are contained in the NFPA Standards Directory which is posted on the NFPA website with copies also available at the NFPA Registration Desk. The certified amending motions that comprise the agenda for today's session will be taken in order as printed in the goldenrod colored handout entitled Annual 2011 NFPA Association Technical Meeting Certified Amending Motions.

The primary regulations governing the NFPA codes and standards development process, including the processing of amending motions at the Association Technical Meetings, are the Regulations Governing Committee Projects. The Regs are also posted on the NFPA

website and published in the NFPA Standards Directory.

I would like to say a few words about the actions that can be taken today and the voting procedures. At this session you are being asked to act on certain motions pertaining to Technical Committee Reports. The Technical Committee Reports on two of these documents, NFPA 79 and 2001, are contained in the 2010 NFPA Fall Revision Cycle Report on Proposals and Report on Comments, the white book; fifteen documents, NFPA 3, 15, 54, 70E, 90A, 99, 101, 204, 232, 664, 703, 704, 720 2112 and 5000, can be found in the 2011 NFPA Annual Revision Cycle Report on Proposals, Volumes 1 and 2, and the Report on Comments, the blue books.

Under Convention Rules, before a motion can be considered for action at this Association Technical Meeting, the intended maker of the motion must have filed a Notice of Intent to Make a Motion, NITMAM, prior to the published deadline of April 8, 2011. These NITMAMs were reviewed by a Motions Committee appointed by the Standards Council Chair. The Motions Committee certified these NITMAMs in compliance with NFPA rules as Certified Amending Motions and published in the Consolidated Motions Committee Report on May 6, 2011. Table A of this

report, the goldenrod colored handout, identified the Certified Amending Motions for consideration today. Only Certified Amending Motions, together with certain allowable Follow-Up Amending Motions, that is motions that become necessary as a result of successful Certified Amending Motions, will be allowed at this meeting. There is a further requirement that a person must sign in to indicate they are, in fact, here to pursue their motion. As part of these procedures, statements for the record, that is, statements concerning Technical Committee actions for which no certified amending motion or allowable follow-up motion is available, are not permitted.

In accordance with 4.6.10 of the Regs, if a quorum is challenged and found to be no longer present, 100 members, the session will be terminated without further action on the reports. Any report on documents that have not been acted on shall be forwarded directly to the Council without the recommendation of this meeting for action in accordance with 4.8 of the Regs. If a quorum is lost during consideration of a report, any motion to amend or return that report that have passed prior to the loss of a quorum will be processed and

forwarded to Council in accordance with 4.6 and 4.7 of the Regs.

Any appeal based on action by the Association at this meeting must be filed with the Standards Council within 20 days of this meeting. That is by July 6, 2011. Any amendment accepted at this meeting that fails to pass the subsequent committee ballot will automatically be docketed as an appeal on the Standards Council agenda in accordance with Section 1.6.2(b) of the Regs. Note, however, that if an automatically docketed appeal is not pursued by a party, the Council need not consider it.

The votes cast in this Association technical meeting today and the discussions that lead to that voting are an integral and important part of the NFPA consensus process. The Association technical meeting is the forum where the membership considers changes to the reports prepared by the NFPA Technical Committees concerning proposed or revised NFPA codes and standards when such changes are pursued via Certified Amending Motions. Through the motions, debate and the voting at this meeting, the membership makes recommendation to the Standards Council. The Standards Council, under NFPA rules, is the official issuer of all NFPA codes and

standards.

The majority vote of the persons present today is for the sole purpose of making a recommendation to the Standards Council on disposition of the report. The Standards Council will meet on August 9th through 11th, 2011, to make a judgment on whether or not to issue a document. The Council's decision on the document issuance is based on the entire record placed before it, including the discussion and vote taken at this NFPA meeting.

Limited review, following action by the Standards Council, may be available through a petition to the Board of Directors. Any such petition must be filed within 15 days of this Council action in accordance with the Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council. The deadline for notice of such petition is August 26th, 2011.

With respect to voting procedures, the regulations state that voting at NFPA meetings shall be limited to the following. One, those present who are voting members of the Association, that is, those with red badges with Voting Member on the top. If you are not

a voting member of record of the Association registered at this meeting, I ask that you refrain from voting. You need not be a member of an NFPA section in order to vote. You must, however, be a voting member. Only voting members of record should be seated in the front area. Those seated in the back areas or rear areas will not be counted.

Voting will be undertaken in the following manner. There will be no voice votes. The first vote will be by raising of hands. If that is not conclusive, we will conduct a count using electronic voting devices for regular voting members.

I want to say at the outset that I will not cast a vote. Therefore, in the event of a tie vote, the issue automatically fails.

Once a report and certified amending motion is presented, it is open for discussion and anyone in the room has the privilege of participating. The Chair asks that you preface your remarks with your name and company or organization affiliation. Let me repeat that. Your name and company or organization affiliation should preface your remarks, even if you have been to the microphone many times, since we are having the meeting

transcribed for the record.

As you can see, we have red and green signs on the mikes in the room. Red signs indicate opposition to the motion on the floor and green signs indicate support of a motion on the floor. I would also ask that you stand at the appropriate mike and state at the beginning of your remarks whether you are in support or opposition to the motion being debated.

Now a couple of things to note during the floor debate today. First, please be aware that no one participating in floor motions and debate at this meeting is authorized to act as an agent of or speak on behalf of the NFPA, and views expressed during motions and debate, including those expressed on behalf of NFPA technical committees or other entities operating within the NFPA system, do not necessarily reflect the views of NFPA.

Second, a note about NFPA Sections. From time to time the Chair or other representative of an NFPA Section may rise during the debate to state the position of an NFPA Section on a motion that is under consideration. NFPA Sections are groups of NFPA members organized around particular subjects, such as the the Electrical, Fire Service Or Health Care Sections. Under

the Regulations Governing NFPA Sections, a Section may take a position on an issue on the floor of an Association technical meeting. The position of a Section does not necessarily reflect the views of all Section members. Rather, a Section may state a position on a motion if the majority of the Section members attending a Section meeting have approved that position and there are at least 25 votes cast at a Section meeting. The position of a Section is accorded no special status in the NFPA codes and standards development process, and, just as you would with any other position expressed during the debates today, you as a voting member of the Association may weigh or assess such positions as you deem appropriate.

Given the size of the agenda and the amount of material we have to get through, we will start out with five minutes per speaker, but it's my plan to limit the time as appropriate in the event this becomes necessary. There will be a timer that will appear on the middle screen to indicate you have one minute remaining on your allotted time. The Chair reserves the right to hear any new speaker before yielding the floor to anyone wishing to address the same issue a second time.

Motions that are in order, the certified amending motions, are contained in the goldenrod-colored handout entitled Annual 2011 NFPA Association Technical Meeting Certified Amending Motions which are available at the Registration Desk at the back of the room today. The motions pertain to the documents contained on Page 76 of the Annual Meeting Program. As previously stated, this meeting is conducted in accordance with the NFPA Convention Rules that are available on the NFPA website, and there are copies at the NFPA Registration Desk.

Upon completion of action on all certified amending motions relating to an NFPA document, the presiding officer shall entertain any follow-up motions. A follow-up motion is a motion that becomes necessary as a result of the previously successful amending motion. A motion to return a document or to return a portion of a document affected by a previously successful amending motion is always in order as a follow-up motion as long as it's not repetitious. The presiding officer shall make the determination on whether a motion is a proper follow-up motion. The maker of that motion shall be required to explain why it's a proper follow-up motion. A follow-up motion shall require two seconders.

Before we begin today, I would like to address the electronic devices we will be using today to help us obtain the vote when the first vote by raising your hand is not conclusive. The devices will record your support or lack of support of the motion on the floor. There are a few rules that I need to make you aware of. One, all voting members that were issued an electronic voting device are responsible for the device. Each device has been linked to the voting members]'s name. And if the device is lost or broken, they will be held responsible for the replacement of the device. Two, at no time can you hand off your device to anyone to input your vote. Anyone found with multiple units will be asked to leave the Association Technical Meeting. Three, you must return your device to the Registration Desk as you leave the Association Technical Session at the end of the day.

We're going to give the system a test. I'm going to ask you to vote on a motion, and I want everyone to answer either 1, in favor of the motion, accept, or, 2, opposed to the motion, reject. I will give you a five second warning indicating that balloting will be closing. I will then announce that balloting is closed, and the results will be displayed on the middle screen behind me.

Ready? The motion on the floor is to accept Comment 101-20. Please record your vote. You have five seconds. Thhe balloting is closed. The results will be displayed on the middle screen for everyone to see. They are 126 to 70. Now that we know how the devices work, let's proceed.

Finally, I would like to stress that the rules we are operating under today are designed to improve the efficiency and the quality of Association Technical Meetings by eliminating the need to present uncontested documents, by giving you, the NFPA membership, advanced notice of the motions to be presented, and by giving me, as the presiding officer, greater discretion in managing debate, to ensure that the issues are as fully debated as a possible in the available time. It is my hope and expectation that together we can make this Association Technical Meeting a success, and I thank you in advance for your cooperation, patience, and, when we are done, your comments and suggestions for the future. Also, we will be taking comfort breaks as necessary.

At this point, before we begin the documents, I would like to introduce Jim Pauley, Chair of the Standards Council, and Amy Cronin who will present

Special Achievements Awards.

MR. JIM PAULEY: Thank you. Good morning. The Special Achievement Award is presented to recognize significant contribution of a committee member to a single project that has enhance the codes and standards making process. We have one Special Achievement Award that will be presented this morning, and it goes to Thomas Crane. I would like Thomas to please come to the podiums.

MS. AMY CRONIN: Thomas Crane of Crane Engineering in Plymouth, Minnesota, has been serving on the Technical Committee for the National Fuel Gas Code since 1998 and has been Chair since 2009. Mr. Crane served as a contributing author on the 2009 National Fuel Gas Code Handbook and supported the work of other Crane Engineering employees as contributing authors. He was instrumental in guiding the National Fuel Gas Code Committee through the development of the temporary interim amendment on purging.

Mr. Crane represented the committee on written correspondence on this subject to the U.S. Chemical Safety Board. He also represented the National Fuel Gas Committee at the Midwest Energy Conference in

Minneapolis, Minnesota, held in August of 2010.

MR. PAULEY: This award recognizes not only Thomas's leadership and personal contributions, but also the efforts of all involved with NFPA 54, the Natural Fuel Gas Code. Please join me in congratulating Thomas on this Special Achievement Award. (Applause.)

On behalf of the Standards Council, we thank you for your continued dedication to the NFPA codes and standards making system.

We will now move on to the Committee Service Awards.

The Committee Service Award is given to a technical committee member for continuous and exemplary service on one or more committees over substantial period of time, and in recognition and appreciation of distinguished service to NFPA in the development of NFPA codes and standards.

I'm pleased to present this award today to the following very deserving individuals. Our first recipient of the Committee Service Award is John Bender.

John, could you please join me at the podium?

MS. CRONIN: John Bender of Aberdeen, Maryland, has been on the Life Safety Code/Building Code Technical

Committee on Fire Protection Features since 1986 and has been on both the Life Safety/Building Code Correlating Committees since 2007. John also serves on the Fire Code Committee since 1989, the Technical Committee on Commissioning Fire Protection Systems since 2008. And in the past he has served on the Technical Committee on Fixed Guideway Transit Systems from 1989 to 2007, the Technical Committee on Water Mist Fire Suppression Systems from 1994 to 2007. John also was a member of the in NFPA Standards Council from 2003 to 2006.

MR. PAULEY: I had the privilege of serving with John when he was on the Standards Council. So please join me in congratulating John on his many years of service to NFPA. (Applause.)

The next recipient of the Committee Service Award is John Bloodgood.

MS. CRONIN: John Bloodgood of JFB Enterprises in Madison, Wiscosin, was appointed in 1976 to the Technical Committee on Electrical Equipment of Industrial Machinery, and today he continues to serve on this committee after 36 years.

MR. PAULEY: Please join me in congratulating John on his many years. (Applause)

The next recipient of the Committee Service Award is Dr. Marcelo Hirschler. Dr. Hirschler, would you please join me at the podium?

MS. CRONIN: Dr. Marcelo Hirschler of GBH International in Mill Valley, California, serves on several technical committees: Life Safety/Building Code Technical Committee on Furnishings and Contents, 1991 to present; Technical Committee on Hazard and Risk of Contents and Furnishings, 1991 to present and Chair since 2001; Technical Committee on Fire Tests, 1996 to present; the Technical Committee on Merchant Vessels, 1998 to present; the Technical Committee on Fixed Guideway Transit Systems, 2001 to present; Technical Committee on Air Conditioning, 2002 to present; and in the past he served on the National Electrical Code, Panel 15, 1993 to 2002.

MR. PAULEY: Please join me in congratulating Dr. Hirschler on his years of service to NFPA.

(Applause)

The next recipient is John Kampmeyer. John, could you please join me at the podium?

MS. CRONIN: John Kampmeyer of Triad Fire Protection Engineering Corporation in Springfield,

Pennsylvania, serves on the Technical Committee on Smoke Management from 1987 to present; the Building Code Correlating Committee, 2000 to present; and the Technical Committee on Commissioning Fire Protection Systems, 2008 to present.

MR. PAULEY: Please join me in congratulating John. (Applause)

The next recipient of the Committee Service Award is Eric Rosenbaum.

MS. CRONIN: Eric Rosenbaum of Hughes Associates, Incorporated, in Baltimore, Maryland, serves on the Life Safety/Building Code Technical Committee on Means of Egress, 1995 to present; the Technical Committee on Fire Protection Features, 1998 to present, and Chair since 2003; the Life Safety Code Correlating Committee, 2003 to present; the Building Code Correlating Committee, 2005 to present; and the Technical Committee on Alternative Approaches to Life Safety Code, 2008 to present.

MR. PAULEY: Please join me in congratulating Eric on his award. (Applause)

MR. PAULEY: The last three recipients of the Committee Service Award cannot be with us here today, but

we will acknowledge and thank them for their service.

MS. CRONIN: The NFPA Technical Committee members who are recipients of the 2011 Committee Service Awardss but could not with us here today are: Pat Brock of Oklahoma State University, Michael Earl Dillion of Dillon Consulting Engineers, James Stallcup of Grayboy, Incorporated.

MR. PAULEY: Let's give all those recipients a round of applause. (Applause)

This concludes the awards presentations for this morning, and now we will continue on from yesterday with the remainder of the documents in the Association Technical Session. Thank you.

MR. MCDANIEL: Thank you.

The first report under consideration this morning is that of the Technical Committee on Commissioning Fire Protection Systems. Here to present the committee report is Committee Chair Maurice Pilette, Mechanical Designs Limited. The committee report can be found in the blue 2011 Annual Revision Cycle ROP and ROC. The certified amending motions are contained in the Motions Committee Report and behind me on the screen. We will proceed in the order of the motion sequence number

presented.

Mr. Pilette.

MR. MAURICE PILETTE: Good morning, Mr. Chair, ladies and gentlemen. The report of the Technical Committee on Commissioning Fire Protection Systems is presented for adoption and can be found in the Report on Proposals and the Report on Comments for the 2011 Annual Meeting Revision Cycle.

The Technical Committee has published a report consisting of a new document, NFPA 3, Recommended Practice on Commissioning and Integrated Testing of Fire Protection and Life Safety Systems. The report was submitted to letter ballot of the Technical Committee that consists of 33 voting members. The ballot results can be found on Pages 3-1 to 3-92 of the Reports on Proposals and Pages 3-1 to 3-17 of the Reports on Comments.

The presiding officer will now proceed with the certified amending motions.

MR. MCDANIEL: Thank you, Mr. Pilette.

Let's now proceed with the discussion of 35 amending motions on NFPA 3.

MR. TERRY VICTOR: Thank you. My name is Terry

Victor with Tyco/Simplex Grinnell. I would like to move to accept Comment 3-12.

MR. MCDANIEL: Thank you.

There's a motion on the floor to accept Comment 3-12. Is there a second?

FROM THE FLOOR: Second.

MR. MCDANIEL: We do have a second. Please proceed with the discussion on the motion.

MR. VICTOR: I'll be making a series of amended motions accepting comments submitted to the NFPA Technical Committee. These comments were not submitted with the intent to discredit the hard work of the Technical Committee, but to enhance the document and ultimately make it better. Understand, this new document is a recommended practice and not yet a standard. But I'm certain it will be proposed as a standard during the next revision cycle, and it's important it's as complete and usable document as it can be when it's published for the first time this fall. That's my intent with my motions this morning.

My first motion is to add a definition for the term construction manager/general contractor. The definition that was submitted to the committee was a

construction manager is a company that has a written agreement between the owner of a project or client and a firm of professionals for planning, design, construction and commissioning of the construction project. A general contractor is a company that performs a contract all by itself or through the use of subcontractors whose activities it supervises and coordinates. This definition is paraphrased from the businessdirectory.com as a source.

The Technical Committee rejected this definition and made the statement the contractual agreement between the general contractor and subcontractors is not within the scope of this document. My response to that is that the addition of a definition has nothing to do with the contractual agreement. These terms are used throughout the document numerous times, and an entire section, 5.2.2.10 is dedicated to the responsibilities of this important member of the commissioning team. However, these terms aren't defined in the document. Nor are these terms in the official NFPA glossary of terms. Nor can they be found in the dictionary, which is supposed to be the source for ordinary accepted meanings.

The committee found it important to define such widely-known construction terms as building, construction document, coordination drawing, installation contractor, and operation and maintenance manual, but for some reason did not want the definition for construction manager general contractor. Most of us who are involved in the construction business understand these terms. However, someone without a construction background who picks up this document and tries to understand the role of the commissioning team members needs this definition and this is the only place that it can be found since the other reference sources is not available.

I ask the membership to accept this motion and add this definition to NFPA 3.

MR. MCDANIEL: Mr. Pilette, would you like to comment?

MR. PILETTE: This new document that has been proposed to the membership has been four years in the making. The committee has worked long and hard on this document by several meetings and task groups, and the affirmative vote of being unanimous of the committee of 29 to zero speaks for itself. The Chair supports the actions of the committee as proposed.

MR. MCDANIEL: Thank you, Mr. Pilette.

In fact we will open up the debate on the motion. Please provide your name and affiliation and whether you are speaking in support of or against the motion.

MR. MARCELO HIRSCHLER: Marcelo Hirschler, GBH International, speaking against the motion.

I am the chairman of the NFPA Advisory Committee on the Glossary on Terminology. I am not speaking on behalf of the committee, just on my own behalf.

The definition proposed contravenes the manual style of NFPA definitions. It's a definition in two sentences. I urge you to disapprove this. Thank you.

MR. MCDANIEL: Microphone 1.

MR. RODGER REISWIG: Good morning. Rodger Reiswig with Simplex Grinnell Tyco International. Speaking in favor of the motion. I'm also a principal member of NFPA 3.

As Mr. Pilette had said, the committee did vote unanimously on this; however, there was much debate on this topic in both our ROP and ROC. And the definition or the word is used, the terminology is used throughout

the document. I believe this is something that should be added.

MR. MCDANIEL: Microphone 2.

MR. JOHN KAMPMEYER: John Kampmeyer, Triad Fire Protection, and I'm also a member of the NFPA 3 Committee. I'm speaking against this motion.

Basically, the definition as proposed is flawed. And if you go to the Construction Management Association of America's website, they define construction management as a professional management practice consisting of an array of services applied to construction projects and programs through the planning, design, construction, and post-construction phases for the purpose of achieving project objectives.

There is nothing in there about the contractual relationship. Many construction management projects are performed without a contract with the design professional. The design professional works directly for the owner, the construction manager manages the construction activities. Thank you.

MR. MCDANIEL: Microphone 5, please.

MR. JOHN VIOLA: My name is John Viola, United Technologies Fire and Security. I have been a contractor

for more than 40 years.

MR. MCDANIEL: Speaking for or against?

MR. VIOLA: I'm speaking in favor of the motion. I'm speaking in favor of the motion because as a contractor for all these years I think it's very important for all the stakeholders involved in the commissioning and testing of systems to understand who is who and what is what, and I think a definition such as the one that Mr. Victor has proposed is adequate and is required and needed in the standard or the recommended practice. Thank you.

MR. MCDANIEL: Any further discussion on 3-1 to accept Comment 3-12? Seeing none, we will move to a vote. Before we vote, let me restate the motion. The motion on the floor is to accept Comment 3-12.

All in favor of the motion please indicate by raising your hand. All opposed to the motion please indicate by raising your hand. Motion fails.

Let's move on to Motion 3-2. Microphone 5.

MR. VICTOR: Terry Victor with Tyco/Simplex Grinnell. I move to accept Comment 3-17.

MR. MCDANIEL: There's a motion on the floor to accept Comment 3-17. Is there a second?

FROM THE FLOOR: Second.

MR. MCDANIEL: We do have a second. Please proceed with the discussion on the motion.

MR. VICTOR: This motion has the effect of adding a new item to the list of activities that the commissioning team should do in the planning phase of a project. The planning phase is to define the document as the phase during which the fire protection and life safety commissioning team is formed and initial project concepts and the owner's project requirements are developed.

5.2.1.2 starts off with the statement that during the planning phase of the project the fire protection and life safety commissioning team should do the following, and then there are seven different activities that are listed. This motion would add one more activity to that list, and it would say include all commissioning and integrated test requirements in the construction document.

The technical committee rejected this addition to the list and made the statement contractual agreement between the general contractor and subcontractor is not within the scope of the document, and a second statement

that read the proposed location for the text is inappropriate for the planning phase.

In response, I would like to address each statement. First, the comment itself does not reference any contractual agreement. The intent is to make sure that the construction document which is a term that's used throughout NFPA 3 includes the commissioning and integrated test requirements. Nowhere else in NFPA 3 is this clearly stated.

Second, the committee seemed to recognize that the text was important but doesn't believe it belonged in the planning phase. If it's not included in the planning phase, where should it be included? The planning phase requires owner approval before proceeding to the next phase which is the design phase. To add these requirements to the construction document during the design phase is too late in the process.

I ask the membership to accept this motion and add this important requirement at the appropriate phase of the commissioning process. Thank you.

MR. MCDANIEL: Mr. Pilette, would you like to give the committee position?

MR. PILETTE: The committee reviewed this and

discussed this on numerous occasions and felt it was adequately covered in the document as written, this being more in the contractual relationship, and this allows more flexibility as written as proposed between the contractual relationship that would occur in something of this nature as commissioning between the owner and the contractors themselves.

And, again, on this item the committee voted unanimously in favor, with no negatives, 29 to zero, and the Chair speaks and stands behind the action of that committee and wishes that the membership not support this motion.

MR. MCDANIEL: Thank you, Mr. Pilette.

That will open up debate on the motion. Please provide your name and affiliation and whether you're speaking in support of or against the motion.

MR. DAVID HAGUE: Thank you, Mr. Chairman. David Hague representing Liberty Mutual, speaking in support of the motion on the floor. I'm also a member of the NFPA 3 Technical Committee, although not authorized to speak on behalf of the committee.

I think this information needs to be communicated to installing contractors, and including it

in the document really adds an element of project management. Typically, installing contractors are not part of the planning process and may not be aware of specific requirements for integrated testing. So this information really needs to be in the document, as it needs to be communicated to all of the stakeholders in the project. Thank you.

MR. MCDANIEL: Microphone Number 5.

MR. CECIL BILBO: Cecil Bilbo with the Academy of Fire Sprinkler Technology. I speak in favor of the motion.

I heard a couple of times now a statement to the effect of committee unity and unanimity. I'll say while the ballot voting came back 29 to nothing and we did have a good compromise, there are many, many issues that the committee is divided on. This is one of them. I support the author of the commissioning handbook and the maker of the motion, and I would urge the membership to vote in favor.

MR. MCDANIEL: Any further discussion on the motion to accept Comment 3-17?

MR. PILETTE: I would ask again for the membership to vote against this motion. The committee

speaks for itself. There are committee members that have spoken for the motion, but their actions are different during the committee actions themselves. Again, this is a brand new document, it has gone through that scrutiny after four years, and the committee voted unanimously with no negatives to go forward with this document as written.

And the item in question here gives all the parties more flexibility without being tied down to a particular item that would hamper contractual agreements.

MR. MCDANIEL: Seeing no further, we'll move to a vote. Before we vote, let me restate the motion. The motion on the floor is to accept Comment 3-17.

All in favor of the motion please indicate by raising your hand. All opposed please raise your hand. I think we'll have to call for a vote using the electronic voting device given to the voting members. You must have a red badge with the word Member on the top to be a voting member. Let me remind that you either vote 1, in favor of the motion, accept, or 2, opposed to the motion, reject. The motion on the floor is to accept Comment 3-17. Please vote. You have five seconds. Voting is closed.

The result is to reject.

MR. PILETTE: So much for the electronic age. Thank you.

MR. MCDANIEL: Okay. Let's move on to Motion 3-3. Microphone 5, please.

MR. TERRY VICTOR: Terry Victor, I'm with Tyco/ Simplex Grinnell. I move to accept Comment 3-24.

MR. MCDANIEL: There's a motion on the floor to accept Comment 3-24. Is there a second?

FROM THE FLOOR: Second.

MR. MCDANIEL: We also have a second. Please proceed with discussion on the motion.

MR. VICTOR: We're getting closer, aren't we? This motion has the effect of adding a new item to the list of responsibilities for the authority having jurisdiction within this document. So all you AHJs listen closely.

This motion has the effect of clearly stating that the authority having jurisdiction is to be involved in the project at the point of approving the basis of design. The motion would add the statement approve the basis of design at the end of the design phase and before construction phase begins. Section 5.2.2 describes the

various entities that are being included in the fire protection life safety commissioning team. Each entity has a list of responsibilities that take place through all phases of the commissioning process. The authority having jurisdiction has the smallest of responsibilities in the NFPA 3 process, none of which includes approving the basis of design at any phase in the project.

The Technical Committee rejected this position of the responsibilities of the AHJ and made the statement approval of the basis of design is not a part of the regulatory process. Let me repeat that. The Technical Committee rejected the comment with the statement approval of the basis of design is not part of the regulatory process.

In response to that, I would like to point out every fire protection and life safety project I have ever been involved with required approval by the authority having jurisdiction. Too many times the authority having jurisdiction is brought into the project during the construction phase when shop drawings and calculations are submitted for approval and/or permitting. Comments made or requirements required by the AHJ at this point in the project slow down the construction phase and cause

1 additional cost due to revised scope, additional devices,
2 different integrated testing requirements and/or delays
3 in the construction schedule. The authority having
4 jurisdiction should review the basis of design at the
5 completion of the design phase before construction
6 begins.
7 I ask the membership to recognize the need to
8 have the authority having jurisdiction involved to the
9 point of approving the basis of design during the
10 appropriate phase of the commissioning process. Thank
11 you.
12 MR. MCDANIEL: Mr. Pilette, would you like to
13 offer the committee position?
14 MR. PILETTE: The committee action speaks for
15 itself. We have an excellent consensus basis with AHJ
16 representation on the committee. This was debated, and
17 there's no amperage here of an AHJ procedural or
18 involvement in this process. The AHJ has authority to
19 walk in or deal or identify any issues they may have
20 within the construction phase of the approval stuff.
21 Again, the complexity of buildings, complexities of codes
22 and regulations can be very fluid and subject to change,
23 where the authority cannot be, or the authority having

jurisdiction cannot be, you know, tied to a particular point in time and needs that flexibility to make changes or approve things that may change for their communities or that building. So the committee felt strongly not to put this in to further restrict the authorities having jurisdiction approval process.

MR. MCDANIEL: Thank you, Mr. Pilette.

That will open the debate on the motion. Please provide your name and affiliation and whether you're speaking in support of or against the motion. Microphone Number 3.

MR. DAVID HAGUE: Thank you, Mr. Chairman. David Hague representing Liberty Mutual. Speaking in favor of the motion. Also, a member of NFPA 3, although not authorized to speak on behalf of the committee.

Building code requirements are similar to this language. As a matter of fact, NFPA 5000 in Section 1.7.6.3.1.9 specifically requires this approval. So including this language in NFPA 3 will make it more consistent with the Building Code. The NFPA commissioning book, those requirements are also referenced in that document as well. So I see no harm in adding this language to NFPA. It just makes it stronger

and more consistent with building codes in general. Thank you.

MR. MCDANIEL: Microphone Number 2.

MR. ART BLACK: Art Black, Carmel Fire Protection, speaking against the motion.

I am an AHJ. The basis of design is an integral part of the commissioning process which is the owner's initiative. It is not a regulatory function. We review the basis of design, but not necessarily approve the basis of design. Any requirement of approval is going to be found in the enabling legislation in a jurisdiction, not necessarily in the recommended practice NFPA 3. Thank you.

MR. MCDANIEL: Microphone Number 2.

MR. CECIL BILBO: Cecil Bilbo, Academy of Fire Sprinkler Technology, speaking against the motion.

While I do support a couple of Mr. Victor's motions, this is not one I can, specifically because of the language. At the end of this proposal it says that the approval needs to happen after the design phase and before the construction phase. And, as was explained during this meeting and other sessions, these phases may overlap. The language is not appropriate for this

document. I speak against the motion.

MR. MCDANIEL: Microphone Number 6, please.

MR. PAT CULL: Pat Cull, Lifespan. I want to speak against the motion. I'm also a member of the committee on NFPA 3, although I do not represent their feelings necessarily on these amendments.

I disagree with the motion. This is covered in multiple other documents from 101 on that will give you guidance and information on what you have to do for submittals. Basis of design could very well be outside of the AHJ's realm, if it's something that the owner wants to add, include or integrate with the system. Thank you. I urge you to vote against it.

MR. MCDANIEL: Microphone Number 2, please.

MR. BILL WEBB: My name is Bill Webb, Webb Fire Protection Consulting. I'm speaking against the motion.

I think among the people speaking in favor of this motion there may be a misunderstanding of what a recommended practice is. It's a recommended practice. It's not something you must do.

As far as what appears to be the intent of the submitter, if one reads 5.2.2.1.5, what the AHJ's responsibilities are, recommended, it already talks about

what he's supposed to do for performance criteria, what needs to be done for testing and acceptance and so on. So, in my opinion, the matter is already covered. But we don't need this change.

MR. MCDANIEL: Microphone 5, please.

MR. TERRY VICTOR: Terry Victor with Tyco/ Simplex Grinnell. Speaking for the motion.

I would like to address something that Mr. Bilbo indicated. He said that the language says should be approved after the design phase, and that's not what it says. It says it should be approved at the end of the design phase. You know, there's no doubt that a construction project is a fluid process and different life safety systems that are part of this commissioning process are brought in through the construction of the project at various times. But each one of these life safety systems should be reviewed by the authority having jurisdiction. And I mention "should" because, as Mr. Webb said, this is just a recommended practice. This is not language that, you know, is going to make the authority having jurisdiction have to approve these plans. But the basis of design should be reviewed by the authority having jurisdiction prior to being released for

construction, at least to minimize the amount of cost impact that changes would have going down the road. To bring in the authority having jurisdiction and to submit drawings and calculations and so forth through the construction phase is too late. The contracts have been let to all the subcontractors, the costs have been calculated, and I think it's just too late in the process to have the authority having jurisdiction approve plans during the construction phase. Thank you.

MR. MCDANIEL: Microphone Number 3, please.

MR. ALAN MCCARTNEY: My name is Alan McCartney. I'm AHJ for the Tennessee Valley Authority. I'm in favor of this motion.

I feel it's absolutely necessary that the AHJs partner with the design team to be able to work with this, as the other individual previously said. It is fluid. The intent is to be able to work with them to find out what is possible to be done and to be able to do it in the quickest and least costly manner. So by accepting this we will be able to do that and the AHJs can partner with. Thank you.

MR. MCDANIEL: Microphone Number 5, please.

MR. LES ANDRADE: Les Andrade. I work for Fire

Sprinkler Local 669. I stand in favor of this motion.

I have been on projects where I have had the mains installed, sleeves in the floor, and the AHJ comes back and does not approve our calculations. And it is very costly to a project to redo everything once you're done. You have to know what size sleeves to put in before you start the project, so you know what size mains to put in.

I stand in favor of this project, of this proposal. I think it's critical. Thank you.

MR. CECIL BILBO: Cecil Bilbo, Academy of Fire Sprinkler Technology.

The perception that is being presented is that the BOD or the submittals do not have to be made to the AHJ for approval. That is not correct. The document also asks that submittals be made for each and every system prior to the installation of that system. That's prior to the installation. I'm sorry if I misunderstood Mr. Victor's statement that at the end of the design phase. I would have assumed that would have been after the design phase.

MR. MCDANIEL: You're speaking for or against?

MR. BILBO: I'm speaking against the motion.

MR. MCDANIEL: Microphone Number 6, please.

MR. RICK KABELE: I'm Rick Kabele of Building Safety Associates. I'm a member of the TC 3. I am not speaking on behalf of the committee. However, I wish to point out that this document --

MR. MCDANIEL: Speaking for or against the motion?

MR. KABELE: I'm speaking against the motion.

I wish to point out that this document is for the commissioning of buildings. The proper place for authorities having jurisdiction to approve any design parameters for any project is in the plan review process. It's not within the commissioning process. Please be clear on that. Thank you.

MR. MCDANIEL: Mr. Pilette, any further comments?

MR. PILETTE: Mr. Chair, this document brings in and involves the AHJ in numerous processes of the development and the commissioning plans associated with building construction. And overall and, again, in the big picture it does not restrict the authority or any authority having jurisdiction as long as or interfere with any of his legislative authority granted to him by

approval enforcement authority. So it's very important to understand that the AHJ's role here is involved throughout this entire process at the appropriate time to allow building construction to proceed in a timely fashion and through the permitting process.

MR. MCDANIEL: Any further discussion on Motion 3-3 to accept Comment 3-24? Seeing none, we'll move to the vote. Before we vote, let me restate the motion. The motion on the floor is to accept Comment 3-24.

All in favor of the motion please indicate by raising your hand. All opposed to the motion. Motion fails. Let's move on to Motion 3-4. Microphone 5, please.

MR. TERRY VICTOR: Terry Victor of Tyco/Simplex Grinnell. I move to accept Comment 3-28.

MR. MCDANIEL: There's a motion on the floor to accept 3-28. Is there a second?

FROM THE FLOOR: Second.

MR. MCDANIEL: We do have a second. Please proceed with discussion of the motion.

MR. VICTOR: This and the next two motions deal with integrated testing and trying to put some parameters around integrated testing when it comes to individual

1 components and systems. So this motion will have the
2 effect of adding a new Item 7 with annex language to the
3 list of recommendations for the design, consideration of
4 integrated system testing, and then renumber the
5 remaining items on that list.
6 This motion would add to the list an item that
7 reads the limits of integrated testing by system and/or
8 component. Section 6.2.2.2 describes various times that
9 are to be considered in the design when integrated
10 systems are being committed. Missing from the list is a
11 recommendation that the limits of the integrated testing
12 be clearly identified.
13 The Technical Committee rejected this addition
14 to the list and made the statement the limits of
15 integrated testing by system are defined in the matrix.
16 I believe the matrix referred to in the committee
17 statement is the roles and responsibilities matrix, Table
18 A.5.1.1 in the annex. There are two or three references
19 in the matrix about coordinating and developing test
20 protocols and procedures, but none of these references
21 make any statements but clearly define the limits of
22 testing by system or component.
23 One reason NFPA 3 was created was to eliminate

1 confusion around integrated testing and describe who was
2 responsible to test fire protection and life safety
3 equipment when multiple systems are interconnected
4 through common panels and wiring. Most of the confusion
5 about integrated testing is a result of different
6 entities not knowing where the testing of individual
7 systems or components begins or ends. For instance, a
8 sprinkler water flow alarm initiates a signal that's
9 supposed to make multiple things happen inside the
10 building and outside the building, including initiating
11 alarms, notification, shut down of various building
12 systems and actuation of various life safety systems.
13 However, when testing the water flow alarm, is it the
14 installing contractor's responsibility that all of these
15 functions occurs as designed or should the test of the
16 single component end at the alarm panel?
17 It seems to be clearly defined in the
18 commissioning documents -- It needs to be clearly defined
19 in the commissioning documents as well as in the
20 integrated testing documents what the limits of the
21 integrated testing will be. I ask the membership to
22 recognize the need to have limits of integrated testing
23 by system and/or component included in the basis, in the

design of the test plan. Thank you.

MR. MCDANIEL: Mr. Pilette, would you like to offer the committee position?

MR. PILETTE: The committee was very careful in structuring this document not to interfere in other standards. The scope of this committee is very distinct from the scope and purpose of other standards such as NFPA 13, 72, 96 and the other documents that are out there in the NFPA library that have a very clear, distinct separation. So a lot of the items that are being proposed under this particular motion here would restrict and overlap and cause more confusion if we went or the committee went that way.

So, again, it's a fluid process, not to interfere or hamper the other scopes of the other committees themselves. And overall a review of the matrix in the commissioning process brings all of these pieces together in making it more usable, more user friendly for all the parties involved. And the Chair stands behind that actions of the committee that was unanimous in favor of 29 to zero again.

MR. MCDANIEL: That will open the debate on the motion. Please provide your name and affiliation and

whether you're speaking in support of or against the motion.

MR. TERRY VICTOR: Terry Victor, Tyco/Simplex Grinnell. Speaking for the motion.

I'd just like to address one of the comments that Mr. Pilette made concerning the installation standards, NFPA 13, NFPA 72 and other standards that are involved with the life safety systems that are being installed. This point of where integrated testing starts and stops for these individual systems is not covered in any of these documents.

There was a meeting held in NFPA headquarters a year or so ago to address integrated testing specifically and had all the entities from NFPA 25, 72, 13, all the other installing documents that are involved with integrated testing, and the result of that meeting was that there's still no consensus on how integrated testing is to be performed for these individual systems. Again, does a sprinkler water flow alarm when you're testing the sprinkler system itself or you're testing the fire alarm system itself for these smoke detectors, so forth, is it necessary to trip the elevator recall and make sure all the necessary things happen in the elevator recall

process? As a sprinkler contractor, I have no control over that. As a fire alarm contractor, you have no control over that. So it needs to be clearly defined where the interfaces are for these different system components and to what extent the integrated testing is to be conducted through those interface points.

Now, maybe the commissioning team decides that, okay, when the sprinkler flow alarm goes off we do want to see elevator recall happen. If that's the case, then so be it, put it in the document. But I would think the document would be cleaner if it said stop the limits of the water flow test at the fire alarm panel and then test the fire alarm panel out through the elevator recall and the other systems.

So I'm just trying to add some clarity where there's a lot of confusion, and installing documents do not address this concept of integrated testing and where one system stops and the other systems begins.

MR. PAUL DUNPHY: Paul Dunphy, Harvard University. I speak against the motion.

I think this totally misses the point of integrated testing. I have been a strong proponent on the Technical 3 Committee for integrated testing. When

you test a device, there can be no limits to the testing. That sprinkler flow switch initiates a lot of different interfaces, and it's important to see them all work in an integrated fashion. I would ask you to not support the motion. Thank you very much.

MR. MCDANIEL: Microphone Number 5.

MR. JOHN VIOLA: John Viola, United Technologies and Fire Securities. I'm speaking on behalf of the motion.

I believe that the limits of integrated testing need to be clearly understood and the design methodologies of all entities involved in the design of their systems know where the testing of individual systems and/or components begins and ends, having had some experience with testing and commissioning as a contractor, there's always questions. And I think this particular motion if included in the recommended practice would nail down the roles and responsibilities and the indication where the testing and commissioning begins and ends. Thank you.

MR. MCDANIEL: Microphone Number 5.

MR. CECIL BILBO: Cecil Bilbo, Academy of Fire Sprinkler Technology. I speak in favor of this motion.

While I disagree with earlier motions by the maker, and I totally respect Mr. Dunphy's opinion on this, coming from a contractor's background I absolutely agree that there should be contractually or at least understood in the beginning of the commissioning concept and process there should be an understanding of the integrated testing requirements for that project, and I believe this belongs on there.

I speak in favor of the motion and would urge members, not speaking for the committee, but being a member of the committee, I would ask that you would vote in favor of this motion.

MR. MCDANIEL: Microphone Number 2.

MR. BILL WEBB: My name is Bill Webb, Webb Fire Protection Consulting. I think there's a --

MR. MCDANIEL: Speaking for or against?

MR. WEBB: I'm speaking against the motion.

I think there's a misunderstanding of what this document is. It is not there to help the contractors define what their responsibilities are. It's there to help the owner determine that he's getting what he paid for, and that's what the commissioning document is all about. So to write things that define integrated testing

to help the contractors know where they stop and start is not the purview of this document. It should be what the overall commissioning decides, and that can vary from one job to the next.

MR. MCDANIEL: Microphone Number 5.

MR. CECIL BILBO: Cecil Bilbo, Academy of Fire Sprinkle Technology, in favor of the motion.

While it may be true that understanding in time this committee was charged with and the scope does include integrated testing and requirements, until there's an NFPA 4, which the Standards Council is looking at at this point in time, we would urge voting in favor of the motion.

MR. DWIGHT HAVENS: Dwight Havens, BMPC, speaking on behalf of myself, in favor of the motion.

I have been in this industry for quite a few years. I have been a contractor, I have been an AHJ, and I have been in (inaudible). The way I read this language, it can only help the process. So I urge you to vote in favor.

MR. MCDANIEL: Mr. Pilette, any further comment?

MR. PILETTE: The committee felt it adequately

covered the material by its statement that it's already covered in the matrix, and, again, depending where you are in the entire commissioning process, the planning stage, the predesign, construction, all of this fits into place, and the flexibility of the complexity of some of these buildings, whether or not it be a small 4,000-square foot building or be a 50 story high-rise with several systems in there, that the matrix development needs what the whole commissioning document is about to begin with. It would help the contractors, not restricting themselves in the development stage of the commissioning plan. So I would urge the membership to vote against the motion.

MR. MCDANIEL: Any further discussion on the Motion 3-4 to accept Comment 3-28? Seeing none, we'll move to a vote. Before we vote, let me restate the motion. So the motion on the floor is to accept Comment 3-28.

All in favor of the motion please indicate by raising your hand. All opposed raise your hand. The motion fails.

Move on to Motion 3 -5. Microphone 5, please.

MR. TERRY VICTOR: Terry Victor with Simplex

Grinnell. I withdraw the motion. It was a companion motion to the previous one. Thank you.

MR. MCDANIEL: Thank you.

Thank you, Mr. Pilette.

The next report under consideration this morning is that of the Technical Committee on Water Spray Fixed Systems. Here to present the committee report is Committee Chair Kerry Bell, Underwriters Laboratories, Northbrook, Illinois.

The committee report can be found in the blue 2011 Annual Revision Cycle RPO and ROC. Certified amending motions are contained in the Motions Committee Report and behind me on the screen. We will proceed in the order of the motion number presented.

Mr. Bell.

MR. KERRY BELL: Thank you, Mr. Chair.

Ladies and gentlemen, the report of the Technical Committee on Water Spray Fixed Systems is presented for adoption and can be found in the Report on Proposals and the Report on Comments for the 2011 Annual Meeting Revision Cycle. The Technical Committee has published a report consisting of a partial revision of NFPA 15, Standard for Water Spray Fixed Systems for Fire

Protection. The report was submitted to letter ballot of the Technical Committee which consists of 27 voting member. The ballot results can be found on Page 15-1 to 15-12 in the Report of Proposals and Pages 15-1 to 15-12 of the Report on Comments.

The presiding officer will now proceed with the certified amending motions.

MR. MCDANIEL: Thank you, Mr. Bell.

Let's now proceed with the discussion on certified amending motions on NFPA 15. Microphone 5, please.

MR. TERRY VICTOR: Terry Victor with Tyco/Simplex Grinnell. I didn't intend to have to get up here back to back like this, but here am I. I move to reject Comment 15-3.

MR. MCDANIEL: Thank you. There's a motion on the floor to reject Comment 15-3. Is there a second?

FROM THE FLOOR: Second.

MR. MCDANIEL: We do have a second. Please proceed with discussion on the motion.

MR. TERRY VICTOR: I also am one of Tyco's representative on NFPA 15, but I'm not speaking on behalf of the committee when I'm moving to reject this comment.

The result of this motion would be to remove some new, some changes that were made to Chapter 6, and specifically Section 6.3.2 on pipe stands, and return the language to the 2007 edition for that same section.

The pipe stand changes should be returned to committee for consideration for several reasons. Any one of these would be reason alone to reject the comment. First, this was quite a drastic change that was done at the ROC stage, and the general public has not had an opportunity to comment on or dispute these changes, since this is new material which needs to be vetted to the public comment stage of the revision cycle.

Second, the calculations submitted for these new pipe stand criteria did not include consideration for the piping arrangements that are generally installed. Pipe stands are normally used to support pipes and loops around vessels, transformers and other equipment. Pipe stands and the loop piping that is originally attached to forms and integrated structure. The integrity of this entire structural arrangement needs to be considered in the calculations, and it was not.

The calculations submitted as substantiation for the changes were incomplete. Components such as

anchor bolts and the connections to the base are not verified. The actual method of attaching the pipe stand, the piping to the pipe stands using brackets as shown in the existing figures was not considered at all in the calculations. Instead, the calculations are based on horizontal pipes being attached directly to the pipe stands themselves. Most installations do use these brackets and, therefore, the calculations should take those into consideration.

I ask the membership to accept this motion and return the language of this section back to the 2007 edition. Thank you.

MR. MCDANIEL: Mr. Bell, would you like to state the committee position?

MR. BELL: As noted in the ROC, the Technical Committee voted by a large majority of 20 to 3 to support the revisions referenced in Comment 15-3. Comment 15-3 introduces some much needed revisions to the pipe stand construction that provides critical support for the water spray system piping.

During the ROP meeting the TC considered a proposal to introduce substantial revisions to Table 6.3.2.2 which provides requirements related to the

maximum height of pipe stands. While the committee rejected this proposal, it was also acknowledged that the requirements for the larger diameter pipe stands need to be considered as well as the need to review the technical basis for the pipe support requirements in NFPA 15.

A rather large task group of 7 members was charged with the responsibility of reviewing the pipe support requirements and preparing a comment for consideration by the committee at the ROC meeting. Victoria Valentine of the National Fire Sprinkler Association who was a member of the task group volunteered to undertake a detailed analysis of the pipe stand requirements and provide recommendations to the task group -- to the full committee and the task group.

The excellent work that Victoria and the task group did revealed that the revisions were needed to Section 6.3.2 to provide assurance that the requirements have a sound technical basis. As indicated in the committee's substantiation for Comment 15-3, some of the pipe stand heights need to be reduced so that the plenums to ratio did not exceed 200 which is the standard value typically used for designing structural members.

There were a few other revisions entered in the

pipe support section to clarify existing requirements. It enhanced consistency with NFPA 13 and provided important guidance to the need for seismic analysis when that is required. Since Comment 15-3 introduces revisions only to the pipe support section which is consistent with the intended scope of the task group's work, the committee did not consider these revisions to be new material.

In summary, I strongly urge the membership to support the committee's action which results in pipe support requirements that have a much more solid technical basis compared to the current edition of NFPA 15.

MR. MCDANIEL: Thank you, Mr. Bell.

With that, we will open the debate on the motion. Please provide your name and affiliation, whether you're speaking in support of or against the motion.

MR. DAVID HAGUE: David Hague, representing Liberty Mutual. I'm also a committee member, although not authorized to speak on behalf of the committee. Speaking in support of the motion.

The changes in Comment 15-3 far exceed those

requested in the initial proposal. The information in the comment I feel is incomplete and requires further review by the committee. At this point it's also I think fair to publish this information and provide the general public ample opportunity to comment. These are needed changes in the document, but I don't think it's ready for the light of day at this point.

MR. MCDANIEL: Microphone Number 5.

MR. KEN ISMAN: Thank you, Mr. Chair. Ken Isman with the National Fire Sprinkler Association, and I stand in support of the motion to send this back to committee.

Now, that may sound unusual because you just heard the chairman say it's one of my staff members that actually did the calculations that led to this proposal. But the reason that we're supporting sending this back to committee is we think this issue just needs a little more further study. The calculations that were done regarding the ability of various size pipe stands and the loads they can support are absolutely correct for water-filled pipes subjected to constant gravitational loads. But the overwhelming majority of NFPA 15 systems are deluge systems that are not water-filled pipes -- I've got to

talk better -- are not water-filled pipes subjected to continuous gravitational loads.

There is a precedence in other NFPA standards, like NFPA 13, for using slightly different acceptable slenderness ratios when structural elements are not subjected to continuous loads. Since the deluge systems are not continuously filled with water, there is a possibility that a slightly different slenderness ratio would allow slightly higher pipe stands.

So we ask the body to return this issue to the committee so that it can continue to study the issue.

MR. MCDANIEL: Microphone 5.

MR. TERRY VICTOR: Terry Victor with Simplex Grinnell, speaking in favor of the motion.

I want to point out that the current pipe stand requirements that are in NFPA 15 came from data that was submitted through Automatic Sprinkler Corporation's design manuals and Grinnell Corporation's design manuals, and these manuals go back, to the best of my knowledge, 50 years or more. And this compiled data was included in the 2001 edition of NFPA 15 for the first time. And in my 30 some years of experience in water spray systems and fire protection, I have never known of a single pipe

stand that was installed in accordance with NFPA 15 or design requirements from one of my sprinklers in Grinnell that have failed.

In fact, I have a letter from a member of the company called Fire Protection Industries down in New Jersey. I'm not going to read the letter, but it basically says there was an actual fire and explosion at a transformer at a nuclear power plant that had these pipe stands that were installed in accordance with NFPA 15. Not only did the pipe stands withstand the force of the explosion, but the subsequent water spray system did extinguish the fire and the fire department wasn't even necessary to respond.

So the pipe stands that are in there now currently in the 2007 edition have stood the test of time, they're not failing. You know, to put incomplete criteria into the next edition I think is inappropriate. And, you know, maybe there are some changes that need to be made, but let's go through the process in the proper way and do the calculations the way they should be done and complete those calculations. Thank you.

MR. MCDANIEL: Mr. Bell, any further comments?

MR. BELL: The only additional comment I have

is I would ask the membership to support the committee's position which really does provide a much more solid basis, technical basis for designing these pipe stands.

MR. MCDANIEL: Any further discussion on Motion 15-1 to reject Comment 15-3? Seeing none, we'll move to the vote. Before we vote, let me restate the motion. The motion on the floor is to reject Comment 15-3.

All in favor please raise your hand. All opposed please raise your hand. I'm not going to rule on this one. We will move to the electronic vote.

I'll now call for a vote using the electronic voting devices given to voting members. You must have a red badge with the word Member on the top to vote. Let me remind you that either vote 1, in favor of the motion, accept, or 2, opposed to the motion, reject. The motion on the floor is to reject Comment 15-3. Please vote. You have five seconds.

Balloting is now closed. Thank you. Passes.

Move on to Motion 15-2.

MR. TERRY VICTOR: Terry Victor, Simplex Grinnell. I move to reject Comment 15-4.

MR. MCDANIEL: There's a motion on the floor to reject Comment 15-4. Is there a second?

FROM THE FLOOR: Second.

MR. MCDANIEL: We have a second. Please proceed with the discussion.

MR. VICTOR: I promise you this is my last motion of the day.

The result of this motion would be taking new language and let me make -- This is absolutely new language that was introduced at the comment stage of the change cycle on pipe saddles and putting pipe saddles in the document with some installation criteria that goes with it. The new material is being added in Section 6.3.2.4, A.6.3.2.4, and a new figure A.6.3.2.4. This new material has in no way seen the light of day through the public comment stage and is inappropriate for introduction at this stage.

In addition, there's a conflict between the proposed Figure A.6.3.2.4 which illustrates a pipe saddle that has an adjustment feature that is shown to be less than two inches in diameter with the text of the body standard which requires the supporting member to be at least two inches in diameter. So there's a conflict there. Also, the allowance for the use of adjustable pipe stands for a support member having a diameter less

than two inches intended for supporting pipe sizes up to 12 inches is inconsistent with recommendations provided by some of the manufacturers of this device.

Finally, technically, this new text should have been underlined in the ballot package as required by the NFPA rules, and it was not. I ask the membership to accept this motion and remove this new material from the document. Thank you.

MR. MCDANIEL: Mr. Bell, would you like to offer the committee position?

MR. BELL: As noted in the ROC, the Technical Committee voted by a margin of 19 to 4 to support the revisions referenced in Comment 15-4. Comment 15-4 introduces some revisions related to adjustable pipe saddles which essentially are short pipe stands that had been used in the industry for a number of years that have not been specifically addressed in NFPA 15.

Now, since Comment 15-4 introduced revisions only to the pipe support section, which is consistent with the intended scope of the task group's work, the Technical Committee did not consider these revisions to be new material.

I urge the membership to support the

committee's action to include requirements for pipe saddles in NFPA 15 and reject the motion on the floor. Thank you.

MR. MCDANIEL: Thank you, Mr. Bell.

We will open up debate on the motion. Please provide your name and affiliation and whether you're speaking in support of or against the motion.

MR. TERRY VICTOR: Simplex Grinnell, speaking for the motion.

I just want to point out, and, I'm sorry, Mr. Chair, but I have to point out to the membership here that you did submit a negative ballot yourself on this particular comment. So you recognize that this doesn't belong in the document. And so I ask the membership to agree with the Chair personally and myself and take this new material out. Thank you.

MR. MCDANIEL: Mr. Bell, would you like to comment?

MR. BELL: Thank you very much for making that point. I fully respect the NFPA standards development process, and I respect the consensus of the Technical Committee, and I'm here to support the committee's position. I ask you to reject the motion on the floor.

MR. MCDANIEL: Anything further on this motion? Seeing none, we'll move to the vote. Before we vote, let me restate the motion. The motion on the floor is to reject Comment 15-4.

All in favor please raise your hand. All opposed. Motion passes.

Anything further on this document? Seeing nothing, thank you, Mr. Bell.

The next report under consideration this morning is that of the Technical Committee on National Fuel Gas Code. Here to present the committee report is committee Chair Thomas Crane of Crane Engineering, Plymouth, Minnesota.

The committee report can be found in the blue 2011 Annual Revision Cycle ROP and ROC. The certified amending motions are contained in the Motions Committee Report and behind me on the screen. We will proceed in the order of the motion numbers presented.

Mr. Crane.

MR. THOMAS CRANE: Thank you, Mr. Chair.

Mr. Chair, ladies and gentlemen, the report of the Technical Committee on the National Fuel Gas Code is presented for adoption and can be found in the Report on

Proposals and the Report on Comments for the 2011 Annual Meeting Revision Cycle.

The Technical Committee has published a report consisting of a partial revision of NFPA 54, National Fuel Gas Code. The report was submitted to letter ballot of the Technical Committee that consists of 28 voting members. The ballot results can be found on Pages 54-1 to 54-50 of the Report on Proposals and Pages 54-1 to 54-14 of the Report on Comments.

The presiding officer will now proceed with the certified amending motions.

MR. MCDANIEL: Thank you, Mr. Crane.

We will now proceed with the discussion on certified amending motions on NFPA 54. Microphone 5, please.

MR. JAMES RANFONE: My name is James Ranfone from the American Gas Association. I move to accept Comment 54-33.

FROM THE FLOOR: Second.

MR. MCDANIEL: There's a motion on the floor to accept Comment 54-33, and we have a second. Proceed with the discussion of the motion.

MR. RANFONE: The intent is to remove a new

provision on vent terminations that was adopted by the Technical Committee. This provision would put in a very restrictive requirement on horizontal vent terminations for gas appliances. That is not justified. The proponents provided no information or data that a safety problem existed that warrants this onerous provision. Not one incidence or occurrence to support the incorporation of the requirement were provided by the proponent. There are thousands, literally thousands of existing vent terminations less than 10 feet in townhouses, single family homes, apartments, that have been operating for decades without any problems. This provision would make those installations noncompliant and would greatly impact new installations, limiting horizontal vents, venting of gas applications, and requiring substantial modifications for vent terminations and new designs.

The NFPA Foundation Research Project cited by the proponent was a very limited computer modeling exercise to explore venting plume patterns as a first step to determine whether or not modeling and field verification was needed. The research was limited scope and by no means was used to determine a minimum distance

for openings. For example, modeling looked at only one building type and location, adjacent two-story single family dwellings, one vent termination location 12 inches above grade.

The issue of vent plume impingement was really the reason why that study was under way and has absolutely nothing to do with adjacent buildings. The research public does not -- That research project does not justify the 10-foot distance that the new section would impose on all vent terminations horizontally. It's overly restrictive and shouldn't be applied as part of this. Thank you.

MR. MCDANIEL: Mr. Crane, would you like to offer the committee position?

MR. CRANE: Representing the committee's action on this matter, Mr. Ranfone is correct in that the question involving the subject of this proposal first came to the committees's attention during the prior revision cycle. At that time it was felt that insufficient information was available for the Technical Committee to make proper action based on that, and the decision to have research conducted on that issue was, in fact, undertaken at that time.

As Mr. Ranfone described, the research that was undertaken under an NFPA grant was computer modeling that simulated a select set of criteria associated with this phenomenon. During the current revision cycle the committee evaluated the presentation under the proposal by the submitter and letter ballot ultimately affirmed a 24 to 3 affirmative vote for the proposal as stated.

MR. MCDANIEL: Thank you, Mr. Crane.

That will open up debate on the motion. Please provide your name and affiliation and whether you're speaking in support or against the motion. Microphone Number 6.

MR. PAUL CABOT: My name is Paul Cabot with the American Gas Association, and also against the motion on the floor.

Just it's a little unusual to have two people up here from the same association speaking for and against, but the Association does have a consensus section, and we tend to separate our development activities from the interests of the AGA membership. I serve as the Secretary to the National Fuel Gas Code, both the NFPA 54 Committee and the ANSI Committee Z223.1 which jointly developed the National Fuel Gas Code. I'm

here not to speak on a position of the committee, but for myself as a member of the committee as secretary.

Again, you know, Jim Ranfone is correct, the modeling was limited in nature; however, it did show that there is flue vent impingement on adjacent walls 10 feet away and there is ice build-up in cold temperatures for condensing furnaces. The 10-foot was selected based on that impingement on that modeling.

The NFPA currently lacks -- The National Gas Fuel Gas Code currently lacks provisions regarding vent termination differences from adjacent openings and your adjacent neighbor's home. Code officials often inquire as to the code requirements, and I have to explain to them that there are none and then explain to them that the intent of the distances that the code does have for vent terminations on the same building, to windows and doors of that same building, and, again, it's to prevent the introduction of fuel vent gases into the home through those openings.

The new section through the comment period was further revised to address some of the concerns that Mr. Ranfone and other opponents of this change in that it was restricted only to condensing furnaces and boilers.

Those are Category 4 appliances, so your gas fireplaces, water heaters and whatnot are not impacted by this change. It also was further revised by adding the phrasing "discharge fuel gases perpendicular to the adjacent wall," and the intent of that is to permit flexibility in the installation of these vent terminations. You can place a 45-degree or 90-degree PRC elbow which would then direct the plume away from the adjacent home, and that would meet the intent of the provision. So the provision is not as onerous as the proponent has raised. So I urge the committee to reject this motion.

MR. MCDANIEL: Microphone Number 3, please.

MR. TED LEMOFF: Mr. Chair, thank you. My name is Ted Lemoff. I'm a consultant. And in the interest of full disclosure, I want to tell many of you who know me in my former role, I retired from the NFPA staff a little over six months ago, I was a staff liaison to the committee. However, my comments are my own and have nothing to do the position of NFPA. I'm just speaking from my experience. And, again, for full disclosure, I am employed as a consultant to the NFPA Research Foundation. I was not when this work was done. There

has been no work on this subject during my tenure, so that has, if you will, nothing to do with it, but I wanted you to know what's going on.

I speak against the motion -- I speak in favor of the motion to take this revision out, basically because I don't think there's a problem.

The proponent, who works for an organization that represents code officials, makes the written statement in the ROP code officials continue to ask for some resolution. Resolution being what we're talking about here is you have a building of some type, could be a condo, could be a home, where they are close together, and the builder has elected not to put in a chimney to vent the gas products, but is rather using a fan to blow these out the side wall, which is a perfectly acceptable practice. And as with cluster housing, with putting town homes, the question apparently is being raised by code officials how close can they be.

The answer is there's nothing in the code or has been nothing in the code because the committee doesn't know how to pick a distance. My personal opinion is there is some distance.

However, it has been alluded to this research

report, which was a very good study for what it was funded at and what it did, basically took a first step. It was a computational fluid dynamics model study. They ran 13 runs, as was stated, very limited parameters, and it was one of the key recommendations in the study that these findings be validated by going out in the field and seeing if the model really represented reality. That has not been done.

When I was with the NFPA staff after this and after it was obvious that there was no further research going to be funded, we did publish in the 54 handbook a note that anyone interested and was aware of incidents, we set up a website so they could report the incidents and we would at least have some anecdotal information. We closed it because after a year nothing came in. So I think it was good research, it got a start.

Basically, I don't feel that the committee, although it wanted to do something and I think something should be done, there is absolutely no technical basis to say this report justifies 10 feet or 5 feet or 100 feet. Therefore, I'm in favor of the motion and encourage you to vote for the motion. Thank you.

MR. MCDANIEL: Microphone 3.

MR. LARRY BROWN: Larry Brown, speaking in favor of the motion, representing the National Association of Home Builders. I'm also a member of the AE1223 Committee which is also the NFPA 54 Committee, though not speaking for this committee.

My concern, as expressed by Ted, was this whole idea of this measurement of 10 feet shouldn't be done until we actually have a full study that shows what the actual dimensions should be. So I would urge you to accept this motion and reject the -- accept the comment and reject the proposal until a full study has been done that shows exactly what dimensions should be in the code. Thank you.

MR. MCDANIEL: Mr. Crane, would you like?

MR. CRANE: The only follow-up comment on behalf of debate that occurred within the committee, it has been pointed out that a generation ago gas appliances in this country did not have this issue. By and large, side wall venting is a representation of the development of the technology associated with the gas industry. For that reason the issue of proximity to adjacent buildings had not come up in recent years. The committee felt that it was better to start with a reasonable estimate based

on the research, and understanding that this was an estimate based on incomplete data. The feeling of the committee during discussion is that this is a reasonable estimate on which to proceed.

MR. MCDANIEL: Thank you, Mr. Crane.

Any further discussion on 54-1 to accept Comment 54-33? Seeing none, we move to the vote. Before we vote, let me restate the motion. The motion on the floor is to accept Comment 54-33.

All in favor of the motion please indicate by raising your hand. All opposed raise your hand. Motion fails.

The next motion on NFPA 54 appeared on your agenda; however, the authorized maker of the motion or their designated representative has notified NFPA they no longer wish to present this motion. Therefore, in accordance with NFPA rules, convention rules of 2.6, the motion may not be considered by the assembly and is removed from the agenda.

We move to the next motion.

Nothing further on this document, so thank you, Mr. Crane.

Before we begin the next session, I would like

to introduce Shane Clary from the Standards Council who will be the presiding officer for the next six documents. And we will be taking a break. It is quarter to ten. We need to be back here, ten-minute break, be back by five of. Ten-minute break.

(Brief recess)

MR. CLARY: The House will come to order. Good morning. The next document is NFPA 79, the Electrical Standard For Industrial Machinery. However, we have been advised that the authorized maker of Motion 79-1 no longer wishes to pursue their motion. Therefore, in accordance with NFPA rules, convention rules 2.6, the motion may not be considered by the assembly and is removed from the agenda.

Since there are no other motions for this document, in accordance with NFPA Rules 4.5.6 and Convention Rules 2.6, the document will not be considered at this meeting and instead becomes a concept document that will be forwarded directly to the Standards Council for issuance or other actions.

I would like to thank the committee for their work on this document, and we will now move to the next document.

The next report under consideration this morning is that of the Committee on Air Conditioning. Here to present the committee's report is the committee member, Thomas Hammerberg of the Automatic Fire Alarm Association, Jasper, Georgia. The committee report can be found in the blue 2011 Annual Revision Cycle ROP and ROC. The certified amending motions are contained in the motions committee report and are behind me on the screen. We will proceed in the order of the motions to that are presented.

Mr. Hammerberg.

MR. HAMMERBERG: Mr. Chair, ladies and gentlemen, the report of the Technical Committee on Air Conditioning is presented for adoption and can be found in the Report on Proposals and Report on Comments for the 2011 Annual Meeting Revision Cycle.

The Technical Committee has published a report consisting of a partial revision of 90A, The Standards for the Installation of Air Conditioning and Ventilating Systems. The report was submitted to letter ballot of the Technical Committee that consists of 28 voting members. The ballot results can be found on Page 90A-2 through 90A-22 of the Report on Proposals and Pages 90A-2

through 90A-17 of the Report on Comments.

The presiding officer will now proceed with the certified amending motions.

MR. CLARY: Thank you, Mr. Hammerberg.

Let's now proceed to the discussion of certified amending motions on NFPA 90A which will be 90A-1. Microphone 5.

MR. MARCELO HIRSCHLER: Mr. Chairman, my name is Marcelo Hirschler for GBH International. I'm here representing the North American Flame Retardants Alliance. I move acceptance of Comment 90A-22.

FROM THE FLOOR: Second.

MR. CLARY: Mr. Hirschler, please proceed.

MR. MARCELO HIRSCHLER: It has always been the understanding that the fourth requirement in NFPA 90A is ASTM E84, 25 flame spread and 50 smoke development index. The committee also understood that, and if you look at the Report on Comments, on Comment 90A-33 where it was rejected, the committee says the default requirements would apply to these materials which is why additional requirements are not incorporated.

Now, when you actually go to look at the default requirements, they don't exist. The default

1 requirements are noncombustible. That was pointed out in
2 the Report on Comments both by myself and by Dwayne Sloan
3 for Underwriters Laboratories. So the committee held
4 this comment, and it was my fault that I forgot to put it
5 in at the proposal stage. But we discussed during the
6 ROC that there was another way to do that by doing a TIA.
7 So we went to the TIA, I submitted it, it passed on
8 technical merit, got the three-quarters, it failed on
9 emergency nature, failed by a very slim margin. We
10 received well over the two-thirds, but not quite the
11 three-quarters of the members.
12 So I urge the assembly to incorporate this
13 requirement which is what everyone always thought we had.
14 I'll go a little bit further. A couple of
15 things were mentioned. One, that the material, the
16 requirements already covering Section 4.3.3 on
17 supplementary material for air distribution systems, that
18 is incorrect. Because although the same requirements are
19 contained in 4.3.3, that section applies only to
20 supplementary materials for HV systems. It was also
21 mentioned there's a conflict with Section 4.3.11.2.6.9.
22 However, that is also incorrect. Because that section
23 contains the requirements for limited combustible

materials, which also include a partial revision from the ASTM 84. That is very different from the requirements of 2550 which are the default.

Moreover, it's already been stated repeatedly by resolutions by Standards Council that the requirement for limited combustible material should not be applied to anything other than building products, so it should not be in the default requirement in 90A. That was very clearly established by Standards Council. The default requirement for 90A should not be limited combustible.

As an aside, the requirements in other mechanical codes are just like what is proposed here. The default from materials contained in plenums is 25 flame spread, 50 smoke development index. I urge the membership to approve this motion. Thank you.

MR. CLARY: Thank you.

Mr. Hammerberg.

MR. HAMMERBERG: The committee did vote to hold this because it was felt to be new material, and, in addition, the reason the committee responded as such is that, if this was allowed to be submitted, it was going to undo what the Technical Committee intentionally did for a previous edition in response to the Standards

Council Decision 05-24 dated July 29, 2005.

MR. CLARY: Microphone 2.

MS. PAT HORTON: Pat Horton, representing Steel Tube Institute, and I am opposed to the motion. I would like to support the work of the committee.

First, let's remember that 90A has different rules for various sections. Comment 90A-22 deals with ceiling cavity plenums and raised floor plenums. Two separate sections in one comment such as 90A-22 is a little bit difficult to deal with. But if we view Proposal 42 as well as 41, we can draw a full picture.

Dr. Hirschler is the submitter of both proposals, both address the changing sections, and both were appropriately accepted. 4.3.11.2.6 is the charging paragraph for ceiling cavities and will read, "Materials within a ceiling cavity plenum exposed to the air flow shall be noncombustible or compliant with 4.3.11.2.6.1 through 9 as applicable." That was accepted, there was no change by the committee. 42, the one for 4.3.11.5.5 says, "Materials within a raised floor plenum exposed to the air flow shall be noncombustible or comply with comparable sections."

Both will require materials to be

noncombustible or a list of specific products that can be used. This list has not been changed. The committee has been very specific about this as pointed out by the Chairman there, has had Proposals 41 and 42 submitted by the proponent of 90A-22. I find it sort of strange that he forgot to mention this critical issue that's been in this 90A document for one full cycle and it's never been brought up.

In the items listed there are at least six test methods mentioned in the various subsections. The existing in this list is the only place in 90A that names the E84 test method, and that is used in conjunction with NFPA 259 which requires that materials in the form in which they are used have a maximum potential heat value of 3,500 BTUs.

90A-22 proposes a totally different use of the E84, and there was no text that suggested it in either 90A-41 or 42 submitted by Dr. Hirschler. It would allow E84 without supplemental NFPA 259, 3,500 BTUs again. Also, it does not belong in the charging section. If you will look at the charging sections, you will see that all the test methods are listed separately that have to be performed for the various products.

This comment is new material that would require a great deal of discussion and public input. Hold is the appropriate action. I urge you to vote with the committee and vote no. I believe it would have been rejected if it had been addressed, as pointed out by the Chair. Thank you.

MR. CLARY: Microphone 3.

MR. HOWARD HOPPER: Howard Hopper, Underwriters Laboratories, speaking in support of the motion on the floor.

We previously supported Marcelo on this issue by submitting a negative ballot on the TC decision to hold the comment, and again their decision was to hold it. They did not reject it. We did so, we submitted the negative ballot because we felt that the action by the committee created some unintended consequences.

Now, without the revision included in Marcelo's comment, the default requirement for materials included within a ceiling cavity plenum is that they be noncombustible, unless they're specifically covered by one of the laundry list of requirements included in 4.3.11.6.2 through 4.3.11.6.9.

Now, one of these sections, I believe

4.3.11.6.6, allows supplementary materials for air distribution systems to have an ASTM E84 or UL 723 rating of 2550. Now, there are no requirements that would allow similar materials of the same size and flammability characteristics to also have a 2550 rating, even though they represent the same risk as those materials. Marcelo's comment corrects this inconsistency.

We don't question the committee's basis for holding the comment for the next cycle. However, unless there's a strong technical argument against the comment, we urge you to support the motion on the floor to allow similar products in these spaces to meet the same ASTM E84 and UL 723 requirements that are allowed for supplementary materials in air distribution systems. Thank you.

MR. CLARY: Microphone Number 2.

MR. RICHARD LOYD: Richard Loyd, speaking for myself, a member of this committee, 90A. Not speaking for the committee, I might add. I'm speaking against the motion.

Our understanding during the ROP stage was Mr. Hirschler went through things, and it was our intention to limit the products that do go in plenums, and when he

came back during the ROC and brought up this new material there was very little discussion, simply because it was ruled by the staff and the Chair, Mr. Demers, that it was new material and there was no use in having the full discussion.

Speaking for myself personally, I did intend that it be in the list. Anything in the list is what we intended to go up in in plenums and not any product that met the 2550. So I think the previous speaker was pretty much on track, we did the list, the two negatives votes against us holding it wanted the carte blanche permission as a 2550. That was not in previous documents. I don't think that our committee intended for that to be in this document. Thank you.

MR. MCDANIEL: Number 5, please.

MR. MARCELO HIRSCHLER: GBH International, speaking for the North American Flame Retardants Alliance. I'm for the motion.

I want to point out the committee made an error when it referenced resolution. Standards Council resolution is in favor of this because Standards Council resolution was mentioned. It says that building products shall not, other than building products shall not be

limited combustible materials, and this does not address limited combustible materials. Exactly this is the default that we were missing.

And, yes, I am at fault for forgetting to put this proposal in at the proposal stage. I put it in at the comment stage. It was a mistake. But in order to understand the feeling of the committee and the opinions of the committee, you need to go to the TIA where this exact language was put in the TIA and the committee by over three-fourths agreed this was the correct language by technical merit. We missed the TIA, well over two-thirds, but not three-quarters in emergency nature. So the committee agreed with this language.

This is the default language that is used in the International Mechanical Code. And this is the language that the committee believed, and I'm going to read to you. When the committee rejected Comment 90A-33, I'm not going into the merits of this particular comment, but when it rejected 90A-33, it said, the committee concludes this material, which happened to be cable routing assemblies, would default to the general material requirements. The general material requirements, if this is not accepted, are noncombustible. That's obviously

not. These are combustible materials that were included in here. So the committee believes that these are the general material requirements that default requirements.

But, my mistake, my fault, I put it in late, I didn't put it in the proposal stage. That's why the committee was unable to act. But it's clearly the committee's opinion. Look at the results of the TIA. Thank you.

MR. CLARY: Thank you. Microphone Number 2.

MS. PAT HORTON: Pat Horton again, in opposition.

I have worked in the NFPA process for a long, long time. Fortunately, or unfortunately, the NEC is my my main document, and it has a lot of very strict rules which I believe still apply throughout the NFPA process.

Dr. Hirschler forgot to put this in. He forgot for a full cycle. Nobody else put it in because that is not what they intended. Then we try to go to a TIA to bypass the process again when we're right at the end of finishing a new cycle.

I think as far as technical is concerned, the technical needed to be discussed at the meetings, which the committee did not see fit to do and saw it as new

material. I believe it is also a procedural thing that you don't go back. I would love to go back a lot of times and say I forgot to put that in or I think this ought to be done. It doesn't work that way. You put your proposal in, you get your action, you put your comment in, you get your action, and then you come here and ask you people to support or not support you.

I think the procedure should be followed, and it emphasizes that this is a comment that should be held, not put forward. Thank you.

MR. CLARY: Thank you. Microphone Number 5, please.

MR. DICK VERAKSI: Arkamed Chemicals, speaking in favor of the motion.

I see a conflict here immediately that if you have the default requirement to be noncombustible, what do we do about ceiling finishes in plenums and foam insulation inside of a plenum in pipes? They clearly define 2550 as the requirement. If this goes through without the added language, you have to take out the foam insulation and you can't have the finishes on the inside of the plenums. So I think Underwriters Laboratories' statements about the consequences is well, should be well

received, and you should accept Comment 90A-22.

MR. CLARY: Thank you.

Microphone Number 2.

MS. PAT HORTON: Pat Horton again. Against the motion.

I think that we forget that they have divided this up into various parts of 90A and that what we're looking at is certain plenum spaces and what you can put in those particular plenum spaces. They deal with construction separate from the areas that we're looking at right now.

I think the committee has been very discreet in the things they do and that they have been very specific in the things they do. And I again say I believe this shows us that we don't have the information that we need in order to have this go forward.

MR. CLARY: Thank you.

Microphone Number 5, please.

MR. MARCELO HIRSCHLER: GBH International for the North American Flame Retardents Alliance, speaking for the motion.

I apologize for having to come up again. Unfortunately, I need to make a clarification, clarifying

my supporter. I apologize for that. This has nothing to do with interior ceiling wall, with foam plastic. There is a full section of foam plastic that doesn't come into effect one way or the other. This comes into effect for other products that were going into ceilings as the default requirement 2550, same as it goes for supplementary materials for air distribution system. I hope the membership will support this. Thank you.

MR. CLARY: We'll stay on Microphone Number 5.

FROM THE FLOOR: I move to call the question.

MR. CLARY: Do we have a second?

FROM THE FLOOR: Second.

MR. CLARY: This is a non-debatable motion. All in favor of calling the question please signify by raising your hand. All opposed, same sign. Motion carries.

We move to the motion directly before us which is 90A-1 which is to accept Comment 90A-22. All in favor of the motion signify by raising your hands. All opposed, same sign.

Always my first time up. Okay, we're going to be moving to the electronic vote. I will not be ruling on the hand vote. So I now call for the vote using the

electronic voting devices given to the voting members. You must have a red badge with the word Member on the top to be voting. Let me remind you, either vote 1, in favor of the motion, accept, or, 2, opposed to the motion, reject. The motion on the floor is to accept Comment 90A-22. At this time please record your vote. Five seconds. The balloting is now closed.

The result of the vote is that it does not pass.

We will next be moving to Motion 90A-2. Microphone Number 6.

MR. PETER LARRIMER: Thank you, Mr. Chair. My name is Pete Larrimer, maker of the motion. I ask that we accept Comment 90A-62.

MR. CLARY: Do we have a second?

FROM THE FLOOR: Second.

MR. CLARY: Mr. Larrimer is a representative for Mr. Joshua Elvove. Please proceed.

MR. LARRIMER: Accepting this comment will actually reject Proposal 90A-66 which is on Page 90A-17 of the ROP. It appears that the wording accepted by the committee has unintended consequences associated with it. The change to 4.3.12.1.1 in NFPA 90A no longer prohibits

1 hospital corridors from being used as a plenum as part of
2 an HVAC system. The prohibition has been clarified to
3 prohibit the use of corridors only in nursing homes and
4 long-term care facilities. It used to prohibit the
5 corridor from being used as part of the HVAC system in
6 health care occupancies which included hospitals. The
7 corridors are to be kept free of smoke.
8 This change would allow smoke to be drawn into
9 the corridor as part of the HVAC system. Typically, we
10 have an acronym, RACE, and the C stands for confining the
11 fire in a room, and using the corridor as part of an air
12 plenum would actually draw that smoke into the corridor
13 which would be used for egress.
14 In addition, the new 4.3.12.1.2 appears to
15 prohibit air movement between rooms and corridors in
16 nursing homes. The permission for that air movement is
17 only for hospitals and ambulatory health care facilities.
18 The VA who I represent, who I work for, has HVAC design
19 manuals, and we have many positive and negative pressure
20 spaces in nursing homes, such as clean linen and dirty
21 linen where it's expected that there's leakage into and
22 out of these rooms. The previous annex note that was
23 taken out of the code permitted this, and it should be

retained. That annex note stated this requirement is not intended to prohibit air movement between rooms and corridors because of pressure differentials in special institutional occupancies.

For these reasons and these unintended consequences by the change of 90A, I would ask that you accept Comment 90A-62. Thank you.

MR. CLARY: Mr. Hammerberg, any comments from the committee?

MR. HAMMERBERG: The committee's meeting action was to reject this with the statement that it was beyond the scope of the defend in place occupancies. The vote was 26 to zero, with three ballots not returned.

MR. CLARY: Microphone Number 4.

MR. DOUG ERICKSON: Thank you, Mr. Chairman. Doug Erickson, American Society For Healthcare Engineering, a member of 90A, and speaking in opposition to this motion.

I would like a clarification, first of all, about the vote of the committee. The vote of the committee was 28 affirmative with one abstention, I believe. And there was no ROC, there was no comment on this either. Once again, is that correct? Isn't that

what you have?

MR. HAMMERBERG: Yes. This is based on Comment 90A-62. I'm looking at it, and it is on 90A-14, and it shows in here the affirmative was 26 ballots, not returned three.

MR. ERICKSON: So affirmative, not reject?

MR. HAMMERBERG: Affirmative to reject. The committee action was to reject.

MR. ERICKSON: Mr. Chair, I'm really confused because, once again, this was an action of the Technical Committee during the ROP. Maybe I don't have the correct information in front of me, but if we are looking at this as an action of the committee, the committee put this language in place in order to assist us in being able to use that corridor for positive and negative pressure.

MR. MARCELO HIRSCHLER: Point of order.

MR. CLARY: Yes.

MR. MARCELO HIRSCHLER: GBH International.

The committee accepted a proposal at the proposal stage, and then the Comment 90A-62 said reject the proposal. The committee rejected reject the proposal. Okay? I hope that clarifies.

MR. CLARY: Immensely.

MR. ERICKSON: It rejected the proposal to change the language, and the motion on the floor is to reject --

MR. MARCELO HIRSCHLER: No. It rejected the comment to reject the proposal.

MR. CLARY: Through the Chair, please.

Give us a moment.

FROM THE FLOOR: I can do a point of order, Mr. Mr. Chair.

MR. CLARY: Give us a moment here for a second.

(A pause)

MR. CLARY: Microphone Number 1.

MR. JOSHUA ELVOVE: Thank you, Mr. Chair. Josh Elvove. I'm with the General Services Administration, but I'm not representing the General Services Administration at this particular time.

I am the maker of the motion, of the comment, Comment 90A-62. I'm standing at the "for" microphone, but I'm here not speaking for or against this motion.

MR. CLARY: You're providing information?

MR. ELVOVE: Correct. My motion was to reject the proposal based on the use of occupancies where I felt that 90A had no business dealing with occupancy

classifications and that should be left to the Life Safety and/or Building Code. My issue is not with whether or not it is good to use, return air into the corridor. I'm not speaking to that issue. My comment was basically rejected to against the proposal because the proposal used language that I thought shouldn't be appropriate for NFPA 90A.

MR. CLARY: Thank you.

Can you restate what your question is, Mr. Erickson?

MR. ERICKSON: First of all, I'm speaking in opposition to the motion on the floor. What I wanted to do was make sure that the Chair gave the right impression that the vote for the current language that exists was 28 affirmative, one negative. The vote on the proposal to return that, okay, was the 26 or 27 negative and one affirmative -- or affirmative and one negative.

MR. CLARY: Thank you.

MR. ERICKSON: So actually the committee is in favor of this action that is going to try to get returned on the floor of the assembly.

MR. CLARY: Hold on.

(A pause)

MR. JOSH ELVOVE: Point of order, Mr. Chair.

MR. CLARY: Okay. Number 3.

MR. ELVOVE: The committee rejected my comment. That has nothing to do with the discussion. It rejected my comment unanimously. I'm sorry they did that, but it has nothing to do with this discussion.

MR. CLARY: The proposal was accepted by the committee, then the comment to reject the proposal was then rejected. So, basically, the committee has maintained their position through the proposal stage and the comments stage.

So, with that, Microphone 4, please proceed.

MR. DOUG ERICKSON: Doug Erickson, American Society For Healthcare Engineering, member of the 90A TC, speaking in opposition to the motion.

First of all, I understand that the Health Care Section is going to rise to recommend being in favor of this. And I was very sorry that I missed a series of meetings where I could try and discuss it with the Health Care Section to be able to show them that this is a good proposal. The provision was added actually by the Health Care community during the ROP meeting and received a vote of 26 affirmative to one negative. No comments were

1 received during it that was going to sway it.

2 By returning this language that has been

3 written, it will continue to give the authority having

4 jurisdiction the opportunity to restrict the hospital

5 corridor or the ambulatory surgical center corridor from

6 being used for a small amount of air movement to provide

7 a negative or positive pressure to the corridor.

8 This positive relationship or pressure

9 relationship to the corridor is absolutely necessary to

10 protect health care workers from acquiring airborne

11 infectious diseases called isolation rooms or

12 immunocompromised patients from acquiring infections

13 called protected environments.

14 I don't agree that the language is flawed. The

15 national standards of ASHRAE 170, the Standard For

16 Ventilation of Health Care Facilities, and the guidelines

17 for design and construction of health care facilities

18 prohibit the use of return air systems in all patient

19 care areas of hospitals and ambulatory care facilities.

20 These standards are referenced by 42 states, the Joint

21 Commission, federal agencies such as the Department of

22 Defense, Indian Health Service, HUD, Army Corps of

23 Engineers, and the Public Health Service.

1 Please reject the motion and don't place our
2 patients and our health care staffs in jeopardy of
3 acquiring an infection by not allowing us to use the
4 corridor for this small amount of make-up air to allow us
5 to have our negative and our positive pressures. Thank
6 you.
7 MR. CLAYTON DUDD: I'm Clayton Dudd with the
8 (inaudible). I'm representing the Health Care Section.
9 Speaking in favor of the motion. Yesterday the Health
10 Care Section at Executive Board meeting voted to support
11 this motion.
12 MR. CLARY: Microphone Number 2.
13 MR. MARCELO HIRSCHLER: GBH International,
14 representing the North American Flame Retardants
15 Alliance. I am a member of the committee. Of course, I
16 do not speak for the committee. I'm against the motion.
17 I just want to point out that the 90A-66
18 proposal which is what this is all about, because the
19 comment just rejects rejecting the proposal, so this is
20 all about incorporation of new language, 90A-66. So if
21 you want to follow what is going on, go to Volume 1 of
22 the Report on Proposals on Page 90A-17 and there in
23 90A-66 is the language that we're talking about.

This language was put in because at the request of Mike Jontry from the Illinois Department of Public Health, and I urge you to go to Page 90A-21 of the Report on Proposals where he explains why this is needed and why it is really important this language be added. So this is an important addition, and I urge you to support the committee and continue retaining the language. Thank you very much.

MR. CLARY: Microphone Number 5.

MR. BILL KOFFEL: Bill Koffel, Koffel Associates, also a member of the committee, speaking for myself in support of the motion.

I would call your attention to Proposal 90A-66. Unfortunately, I think both sides of this argument are saying the same thing. We need some of this language. But the way the committee did it, as I pointed out in my negative ballot, is problematic. It is two particular problems. First off, in the paragraph that they revised, instead of using the word "occupancy" they used the word "facility." So if I am in a multiple-occupancy building, we have imposed a requirement on the non-healthcare portion of that building, it was never intended by the current text in the standard.

1 Secondly, by deleting hospitals, the committee
2 thought that the new paragraph would address the issue.
3 Well, it addresses the issue that Mr. Erickson needs to
4 have addressed, and that is to allow those pressure
5 differences where necessary for the design of the
6 facility. However, it also removed the prohibition of
7 using the corridor for normal supply and return in a
8 hospital or ambulatory health care which was in the
9 current standard.
10 So, again, I think both sides are saying the
11 same thing. I would actually encourage you to support
12 this motion, and I would hope that through an appeal to
13 the Council we could get the correct language and
14 accomplish the intent of the original proponent as well
15 as the arguments I have heard here today.
16 MR. CLARY: Thank you.
17 Mr. Hammerberg, any concluding comments?
18 MR. HAMMERBERG: No, Mr. Chair.
19 MR. CLARY: Microphone Number 2.
20 MR. MARCELO HIRSCHLER: GBH International.
21 Just quickly, I would like to -- Against the motion. I
22 would like to urge you to do the opposite of what Bill
23 Koffel just said. Oppose the motion. It can still be

appealed to the Standards Council or a TIA. If there's a slight difference in language that needs to be put in, then that can be put in through TIA or something like that.

The word "hospital" was never in here, so health care was taken out. And instead of health care, nursing home and long-term care facility was put in. I urge you to support the committee. If the language is slightly flawed, that can be fixed by a TIA.

MR. DOUGLAS ERICKSON: Douglas Erickson, American Society for Healthcare Engineering, speaking in opposition to the motion.

I agree with what was just said by Marcelo. Don't put us on the defensive on this one. Don't put us back in jeopardy of having to have the authority having jurisdiction tell us we cannot use our corridors for this make-up air. Don't tell us we're going to have to try to figure out how to protect our patients and protect our health care workers from getting a hospital-acquired infection. This is not the right time to do it.

If we need to correct the language, then let's at least get it in the code, get a TIA published to correct that language. But don't remove what was done.

I think we absolutely need this. Thank you very much.

MR. CLARY: Microphone Number 3.

MR. PETE LARRIMER: Pete Larrimer, Department of Veterans Affairs, speaking in favor of the motion.

I would like to tell you that I believe that the verbiage that was provided actually increases the risk with using the corridors, much more so than the pressure differential they're asking for.

In addition, because the AHJs are misinterpreting the intent of the original standard when, in fact, the annex note does provide assistance to allow that pressure differential to take place, you can't always write code to make sure an AHJ will interpret it properly. But the risk that is added by permitting hospital corridors to be used as plenums and to suck products of combustion from a fire in a room back into the corridor is an unacceptable change at this point in time. Thank you.

MR. CLARY: Microphone Number 3.

MR. EUGENE CABLE: Eugene Cable, Life Safety Consultant, Averill Park, New York, speaking for myself.

I'm in favor of this motion which will, in effect, prohibit the proposed allowance of health care

corridors be used as HVAC plenums for the same reason we just heard. We make a great effort to make these corridors smoke resisting, and this would, in fact, allow some open flows between the rooms and corridor.

MR. CLARY: Microphone Number 2.

MR. BILL WEBB: Bill Webb, Webb Fire Protection Consulting. I call the question.

MR. CLARY: Is there a second?

FROM THE FLOOR: Second.

MR. CLARY: This is a non-debatable motion. We will immediately go to the vote to call the question.

All in favor signify by raising your hands. All opposed, same sign. Motion carries.

We now immediately go to the vote on Motion 90A-2 which is to accept Comment 90A-62. All in favor of the motion please signify by raising your hands. All opposed, same sign. The motion fails.

We'll now move to the related motion sequence for 90A-3, 90A-4 and 90A-5. This is a related motion that either Mr. Thomas Dusza, Designated Rep C. Baldassarra for 90A-3, Peter Larrimer for 90A-4 or Josh Elvove for 90A-5 are the makers of this related motion. Any of these gentlemen can now introduce himself. It

looks like we're going with Mike Number 3.

MR. JOSH ELVOVE: Thank you. My name is Josh Elvove with the U.S. General Services Administration. This time I am representing the U.S. General Services Administration. I move to accept Comment 90A-64 which is CAM Number 5.

FROM THE FLOOR: Second.

MR. CLARY: We have a second.

Mr. Elvove, please proceed.

MR. JOSH ELVOVE: There are actually three certified amending motions on this subject. They all approach the same topic in a different way, but the end result is the same. The objective here will basically result in the same action, and that action will be to retain the current language in NFPA 90A and 5.3.4.6 to maintain the fire damper requirements in shaft walls. The change made during the comment was to add a requirement for combination fire/smoke dampers, where the current requirement is only for fire dampers.

This is the fourth time this issue has come up before this body. So I'm going to give a little history lesson for those who aren't familiar with the issue. In 2002, during the ROP cycle, the Air Movement and Control

1 Association proposed a change to the language that's
2 similar to what you're seeing today in the ROC, basically
3 to require combination fire/smoke dampers in shaft walls.
4 In the comment period there were a number of public
5 comments that were basically rejecting that proposal.
6 All failed during the committee. So, basically, as to
7 the 2002 cycle, the committee proposed to make the change
8 that we're hearing today. The action was brought up to
9 this body in 2002, it may have been Atlanta, may have
10 been Minnesota, I wasn't there at the time. This floor
11 body rejected -- accepted a motion to reject the
12 proposal.
13 So we go into 2005. In 2005 Ruskin submits a
14 proposal to do the exact same thing. Public comments
15 were submitted during the ROC phase. The committee
16 rejects all the public comments. It comes to this body
17 on the floor in 2005. This body supports the motion to
18 reject the proposal. The difference between 2005 and
19 2002 is in 2005, if you remember, this particular
20 standard, the whole thing got returned to committee.
21 In 2008, Ruskin submits an identical change as
22 in the 2005, to institute combination fire/smoke dampers.
23 Again public comments are submitted and again public

comments are rejected by the committee.

In 2008, now we're talking I think into the CAM process, motion was made on this floor, floor vote was taken, this body once again sustained the fact that the proposal and not requiring combination fire/smoke dampers. Getting the drift?

We're in 2011. This time it was a little different. There was a proposal made by the Technical Committee, and they actually rejected their own proposal to come in with fire/smoke dampers. The idea was to solicit public comment which, of course, they did. But they actually rejected their proposal. My motion here on the floor is to sustain that rejection.

I thought they did a good thing. They rejected the proposal, but at the same time I submitted my public comment to sustain their rejection, if you follow all this, another public comment came forward, and here we are today to basically add the requirement once again for combination fire/smoke dampers. It's a little bit different, and others will speak to that. So, basically, we are here for the fourth time to debate the same issue.

In summary for me, because others will speak, this is a one size fits all requirement. No matter what

your occupancy, no matter what your building size, whether you're sprinklered or not, if this proposal, if my motion fails, every building out there that has a shaft and has a penetration shaft will require fire and smoke dampers, not just fire dampers.

We have done this debate since 2002. I'm not sure where the historical information is, you know, but have we done something wrong by not accepting this back in 2002? I'm not seeing any evidence that says we have done any disservice to our life safety by not adding the requirement. So I urge you basically to support the motion and accept Comment 90A-64 which basically rejects the change and current language to add smoke dampers. Thank you,

MR. CLARY: Mr. Hammerberg, any comments from the committee?

MR. HAMMERBERG: The committee did vote to reject Comment Number 90A-64, and they deferred the committee statement to the action that was taken on 90A-65 which essentially was adding some additional language in there. That one was accepted in principle and the language was changed just to comply with the NFPA manual of style and to make the language consistent

within the section.

MR. CLARY: Microphone Number 1, please.

MR. MARCELO HIRSCHLER: GBH International. I'm a member of the committee. I'm not speaking for the committee. I just wanted to complete the history of what -- For the motion.

I want to complete the history of what Josh Elvove just said. This proposal, although it came out in the name of the committee, was presented again by Ruskin again at the committee meeting. The committee voted and decided to reject it first because they asked for more information. More information was brought. I did not vote against it. I voted in favor of the motion at the comment stage. But as I look at the history, there clearly is no need for this additional, this additional smoke damper. There is no new information -- Sorry. Let me change that.

The information presented by the proponent in a study that was done by Dick Lovell and Bill Koffel I think is not compelling enough to overturn what this body has done for three cycles. So I urge you to support the motion. Thank you.

MR. CLARY: Microphone Number 5, please.

FROM THE FLOOR: The Swedish Medical Center, representing the Health Care Section. Yesterday at the Health Care Section Executive Board meeting the Health Care Section membership voted to support this motion.

MR. CARL BALDESARRA: Good morning. Carl Baldesarra of Rolf Jensen Associates. I'm the authorized representative for Tom Douser, the submitter of Motion 90A-3. I'm in support of this motion. I should also mention that RJ has no client or financial interest in this matter.

It's been noted that this proposal or similar proposals have been reviewed several times before, in 2002, 2005, 2008, and now in 2011. Each time there has been a consistent message, and that is there is no technical substantiation for this change. There is no compelling evidence that the existing standard is inadequate or that any problem exists that must be solved.

On the contrary, everyone in this assembly and all other members of the NFPA know that a lot has been done in the last ten, twenty and thirty years to improve fire protection in buildings, making them safer. One could go down the list of things that have been added and

a list of features that have been modified to do so, some at great cost where required. However, this proposed change making all fire dampers smoke dampers for all occupancies, for all sizes of openings, for all conditions is too broad, too expensive and not needed. The fire record demonstrates this.

There is a proposed modification which purports to provided some relief by allowing exempting them in the Life Safety Code, but on what basis might the Technical Committees make those exemptions? That answer is not clear. And I believe that's an unreasonable burden on the Technical Committees. The fact is, there's no compelling reason to do so in 2002, 2005, 2008 and now.

I can offer some criticism of the model study used in the report by the proponents, but out of respect to this audience I will not do so at this time. I will just offer one comment. The model does not simulate the automatic fan shutdown which has been required in NFPA 90A and which is a fundamental provision to limit smoke spread in buildings.

Do smoke dampers help limit the spread of smoke? Certainly. Hence the name. I will concede that some smoke will move in the building from the floor of

origin. But is it simply something that one can smell or is it a life safety threat? There has been no correlation of the results in the model to the threat to building occupants using published criteria for that analysis. What is the tenability of the smoke?

In conclusion, the overall record indicates that we do not have a problem. The cases cited in the literature search are not consistent with the code requirements for new construction and the improvements made in our codes. More sprinklers, more smoke detection, better barriers, smoke control, all will result in better performance.

I ask the members to support the motion as you have in the past. There is nothing new to consider. Thank you.

MR. CLARY: Microphone Number 6, please.

MR. TOM EDWARDS: Tom Edwards, President of Lowe Industries, ASHRAE member. I'm in favor to reject this motion and filed the overwhelming recommendation of the Technical Committee.

This motion is a slap in the face to the Technical Committee. There is overwhelming approval to make buildings safer and be consistent with U.S. model

building codes where it makes sense. Duct shafts are a conduit for smoke, whether sprinklered or not. Fire dampers alone do not stop smoke, and, hence, that's why the building model codes have accepted that, and it is required, and it has been made buildings safer, and it is proven. And we're not adding a damper, we are replacing a fire damper with a combination fire/smoke damper that will close upon indication of a smoke detector.

Fire dampers alone do not stop smoke, they do not integrate with smoke detectors, and, hence, the name combination fire/smoke dampers. They're UL tested and approved. They are proven technology to stop smoke from spreading throughout the building. There's millions of them that have been applied for the last forty years. Hence, let's follow the technical experts on the committee, be consistent with existing model codes, and all building occupants deserve this proven life safety system, and reject this motion. Thank you.

MR. CLARY: Microphone Number 2.

MR. RICK CABLY: Mr. Chairman and members of NFPA, I'm Rick Cably of Building Safety Associates representing the Alliance For Fire and Smoke Containment and Control. I speak today in support of the actions of

1 the Technical Committee for this document and ask that
2 this austere body will vote to reject the motion on the
3 floor.
4 The committee has recommended that openings
5 into or from shaft enclosures within buildings be
6 protected by combination fire/smoke dampers to limit the
7 migration of products of combustion, including smoke,
8 throughout a building at the time of a fire incident
9 within a building. It is well known that fire gases
10 expand in the environment and increase in buoyancy in
11 direct proportion to the heat release rate of the fuels
12 present. These expanding gases will seek any and all
13 routes of transport available within the building,
14 including shaft ways. This assumption is only a
15 restatement of the physical laws of expanding gases.
16 While the historic protection provided to shaft
17 ways within buildings has been through the installation
18 of thermal or fusable link fire dampers, it is important
19 to acknowledge that overall building fire protection has
20 generally improved with the increased installation of
21 automatic fire sprinkler systems required in most
22 buildings that would also require fire resistant
23 protection of shafts.

At the time that fire dampers were incorporated into the model building codes, combination fire/smoke dampers were not commonly available in the marketplace. Times have changed. Science has developed a better understanding of the effects of fire and smoke on building occupant safety and the fundamental ability of building occupants to exit a fire building. I have only to remind this body of the outcomes of the disastrous 1980 MGM Grand fire where the great loss of life during that fire was largely the result of vertical smoke migration and concentrations at the highest levels within that structure, all facilitated by multiple unprotected vertical openings throughout the building.

I wish to make the point that thermally activated fire dampers provide no protection against the migration of smoke. What remains as a hazard to life safety from fires within buildings is the impact of the products of combustion, including smoke, that have the effect of impeding or adversely impacting the ability of building occupants to safely exit the building at the time of a fire incident.

Fire sprinklers do not eliminate the threat of smoke to human life. Studies conducted by Koffel and

Associates have confirmed the effectiveness of combination fire and smoke dampers in restricting the migration of these hazardous products of combustion and smoke within all buildings under fire conditions, sprinklered or not. Koffel and Associates also discovered the marginal cost differences for the substitution of combination fire/smoke dampers and found that the costs associated with implementing the proposed improvements to life safety were, indeed, marginal in nature.

I will suggest it is our responsibility as the NFPA to provide for the protection of life through the codes and standards that we promulgate worldwide and that responsibility does not include any consideration to cheapen the construction costs of a building structure at the expense of building occupant life safety.

I urge your vote to reject this proposal so that we may better protect the life safety of the public we are charged to represent. Times have changed. We are today more knowledgeable of the dangers to life from the hazards of smoke. Please support the Technical Committee's decision to reject this proposal. Thank you.

MR. EUGENE CABLE: Eugene Cable, Life Safety

Consultant, Averill Park, New York. I speak for the motion.

I am speaking on behalf of New England Health Care Engineering Society who polled the membership, and the Executive Board directed me to speak in their behalf. We are in favor of this motion to eliminate the proposed requirement for combination fire/smoke dampers for new construction with full quick response sprinkler protection. The membership sees none or very little life safety benefit for the significant additional cost.

We want to make the point that if combination dampers were installed, around 150 of them, for example, for a 500,000-square foot building, the ongoing inspections, testing and maintenance costs are significant for years down the road. There's also the real cost of patient care interruption and system repair from unwanted alarms due to the hundreds of additional duct smoke detectors.

Given that the Life Safety Code and 90A has for many years exempted smoke dampers and smoke barriers due to full sprinkler protection, it makes no sense to require them in vertical shafts. We urge you to support this motion.

MR. CLARY: Microphone Number 1, please.

MR. RAY GRILL: Thank you, Mr. Moderator. My name is Ray Grill, I'm with Hareb. I'm speaking in favor of the motion on the floor.

I have been involved in this issue, debated this issue before the body the last time it came to the floor, and there has been no changes that can support this incorporation of smoke dampers into all buildings.

I'd just like to point out a few issues. People have been mentioning the model codes. When this first got introduced into the IBC in the 2000 edition and as soon as the 2000 edition was enforced, there was a blanket requirement for smoke dampers. In every high-rise building that had residential occupants we had to go to appeals in order to eliminate the smoke dampers at the connections to vertical shafts because we can't put smoke-activated dampers in kitchen exhausts or dryer vents. All those devices had to be vented through vertical shafts. So the proposal as is written now just would not work in buildings. It does not work. Even if there was a need, there would have to be exemptions made, and there are no current exemptions in this.

Another thing I would like to point out is

there are a number, you know, because of those issues there's a number of jurisdictions that I work in, the District of Columbia, Commonwealth of Virginia, that have in their adoption of the IBC, they have written an amendment to exempt sprinklered buildings from the requirement for smoke dampers. So it is recognized, and there have been no issues in sprinklered buildings from smoke migration through shafts.

The other thing I would like to point out is in the cost estimates, in the substantiation for the original comment there's a claim made that there was no consideration for smoke detectors because smoke detectors were provided throughout buildings. We do provide a lot of smoke detectors in buildings, but we don't have area detection throughout all buildings that would require smoke dampers in this study. There's also no indication of controls. You know, all of those devices had to be controlled. So the cost estimates were flawed, in my opinion.

That's basically it. Thank you. I urge the body to support the motion on the floor. Thank you.

MR. CLARY: Microphone Number 5.

MR. DOUGLAS ERICKSON: Douglas Erickson,

American Society for Healthcare Engineering and also a member of 90A, but not speaking for the Technical Committee. I speak in favor of this motion.

To include this mandatory requirement for all occupancies which would include health care is not substantiated by the historical data presented by the NFPA. The document I'm referring to is the statistical report titled Structural Fires in Mental Health and Substance Abuse Facilities. This is a four-year review from 2003 to 2006. And in that report, if you read that report, there's no demonstration that there's a need for increasing the current requirements in health care facilities which would include, of course, adding smoke dampers into vertical shafts. Health care facilities are required to be fully sprinklered, as mentioned before by Mr. Cable with request you are.

This system has a proven track record of being able to contain the products of combustion, the tenability and everything else to the room of fire origin. As a matter of fact, back in 1988 when the health care industry went and requested to become fully sprinklered, it was Koffel Associates that did the study for us that told us that QRS would be much better than

1 going to smoke detector facilities. So we pushed the
2 committee to go to the fully sprinklered health care
3 facility.
4 From a technical standpoint, health care uses a
5 lot of duct work, we penetrate a lot of vertical shafts.
6 We are not just concerned about the initial cost, but
7 also the testing and maintenance which, by the way, is
8 about 25 times the initial cost over the life of that
9 damper which will be approximately 30 to 40 years. It
10 also means the disruption of our physical environment and
11 of our critical ventilation systems when we have to do
12 the testing as required by 90A. This testing and this
13 disruption, every time we open up a ceiling or open up a
14 panel we have the potential of putting our patients at
15 risk due to airborne diseases that, once again, reside in
16 the dust that we have within our health care facilities.
17 With a current fire history of less than one
18 death over a four-year period that was reported in the
19 NFPA statistical reports and an estimated hundred
20 thousand deaths due to what they call health care
21 associated infections, I urge this group not to be
22 putting something in which we are going to be having to
23 disrupt our critical ventilation systems, we're going to

1 having to be opening up and exposing once again this
2 potential airborne infectious disease to our critical
3 patients. And, here again, look at the history, if we're
4 to take a look at that 30-year history over time, that's
5 less than eight patients from fire and three million
6 patients due to health care associated infections.
7 I urge you to allow us to put our resources in
8 the area where we would truly need to put them and not
9 continue to build a better mouse trap in the area of life
10 safety. We need to put the resources into infections,
11 falls, medication errors, et cetera.
12 MR. PAT CORCORAN: Pat Corcoran, speaking on
13 behalf of Air Movement Control Association. And I agree
14 with really everything Mr. Erickson said. I'm speaking
15 in opposition to the motion. I agree with everything Mr.
16 Erickson said. In fact, this proposal exempts health
17 care through the reference to NFPA 101 and specifically
18 Section 8.3.5 on smoke dampers which includes the
19 exemption of smoke dampers through floor penetrations
20 which a shaft would be one of those. So health care,
21 first off, is not really a contentious issue with this
22 proposal because they're excluded from that environment.
23 Secondly, this is not a one size fits all, as

we heard earlier. There are a number of exemptions that exist in the code, or in this proposal, that were included by the Technical Committee. It's all fire damper exemptions, not extended to all smoke damper exemptions. So exhaust penetrations, as we heard earlier, are exempted. They're clearly in NFPA 90A today as an exemption for a fire damper. And those exemptions would extend to a smoke damper.

The notion that by approving this you're somehow extending smoke dampers into all of these exhausts, bathroom exhausts, kitchen exhausts, and other exhaust penetrations is incorrect. They're not included in this proposal.

Finally, when we talk about model codes, and the fact that these products that existed for a number of years, 1984 when UL first introduced smoke damper requirements, health care was one of the first occupancies that adopted this. It was then brought into the Uniform Building Code in 1994, and it's been part of our legacy history now for nearly 20 years. So these products in shafts in 1994 were introduced across the board. It's not new. It's just new to NFPA 90A which is, frankly, behind the times on this technology.

I urge you to support your Technical Committee and oppose this motion.

MR. BILL KOFFEL: Bill Koffel, Koffel Associates. On this item I'm at the microphone that says against in the sense that I'm going to report on the modeling reference that was for the client, the Air Movement Control Association, which is against this motion.

Our work started with the literature search, and that basically identified, and I think that's why you don't hear too many people referring to much literature out there, other than our modeling, is that there's very little out there to support or oppose this particular item. We did find, however, two papers that I will reference. One is a comparison of driving forces for smoke movement in buildings that was written by Dr. Mauer and others and was published in the Journal of Fire Protection Engineering. The modeling that we used is CONTAM, a well-recognized model for smoke or air movement throughout buildings.

Our initial effort was to reproduce the work that was done in the reference paper, and we were successful in doing that, and, in our mind, that

validated the use of the model in this particular application.

We looked at buildings 10, 20, 50 stories in height with and without sprinkler protection. We then went to a design firm and said we need a more realistic high-rise building than what was actually represented in the reference paper. They produced a design for us of the mechanical system, and then we replicated that in the modeling. The input data we used was from the second paper found which were the Plaza Hotel smoke control experiments performed by NIST back in 1989.

Now a quick summary of the modeling results indicated the smoke dampers reduced smoke concentrations on non-fire floors between 94 and 97 percent for unsprinklered buildings. In sprinklered buildings, the smoke detection dampers were equally effective at reducing smoke concentrations on other floors.

There was a reference earlier that there has been no indication of tenability. In all instances, tenability based upon this ability -- Because this is an air movement/smoke movement model, so we were not looking at concentrations of particular products of combustion but, rather, the movement of smoke in the building. In

all instances, tenability based on visibility was never below 30 feet with the smoke dampers present. However, in non-sprinklered buildings visibility based upon the 30-foot threshold did fall below, and, in fact, in a 10-story building visibility fell below the threshold in under 10 minutes.

Now, what I would like to do again, just so everybody has an understanding of what the modeling was intended to do and the outcome of the modeling, is just quickly read the conclusion to the modeling effort.

Based upon the groundwork laid by Mauer and others in the research paper published in the Journal of Fire Protection Engineering, the analysis of a simple air handling system indicates that smoke dampers are effective at limiting the spread of smoke throughout a building by mechanical ventilation even while the mechanical ventilation system continues to be operational.

The analysis also takes into account the effects of smoke movement by stack effect through open shafts in tall buildings. It has been shown that smoke dampers can significantly limit smoke spread through mechanical ventilation systems and can substantially

mitigate smoke spread by stack effect, especially in conjunction with sprinkler systems which significantly lowers the smoke production of fires, significantly reducing the likelihood of property damage and reducing the threat to life safety. When used in conjunction with sprinkler protection or other passive smoke control methods, such as effective building compartmentalization, smoke dampers can provide an effective means at limiting smoke exposure in parts of the building away from the fire. When the modeling results are used in conjunction with the referenced cost analysis, a cost benefit analysis can be performed to determine if codes should require smoke dampers at duct penetrations in shafts in most buildings.

I would like to correct two statements that I heard, one from someone in support and one from someone in opposition to this motion. I have addressed the tenability issue.

MR. CLARY: Thirty seconds.

MR. KOFFEL: One person said correctly we did not include fan shutdown. That is because the dampers will substantially reduce the amount of smoke that we get to those detectors that would cause fan shutdown. And,

lastly, we did not do the cost analysis. We referenced it, it was done by a mechanical engineering firm.

MR. CLARY: Thank you.

Microphone Number 3, please.

FROM THE FLOOR: Point of order.

MR. CLARY: Microphone Number 2.

FROM THE FLOOR: This is a point of information on what we are actually voting on and what the results will be. Because accept Comment 90A-64 which is to reject -- I mean, it says it was rejected. So now, if you accept it, that means you're rejecting, and what the committee did was reject, so I don't understand what's going to happen. Would you, please, inform me?

MR. CLARY: Please hold on.

(A pause)

MR. CLARY: Thank you for your patience. These are all related motions, so by accepting -- The motion we have before us is to accept Comment 90A-64, and by doing this we would return to the previous text or the existing text of Section 5.3.4.6 which is also reflected by the rejection of 90A-65 which was their motion sequence 90A-4. This was what this motion will do.

MR. MARCELO HIRSCHLER: Before we vote, Mr.

Chair, that is incorrect. (Laughter)

Marcelo Hirschler, GBH International. If you reject a comment that was -- If you accept the comment, the comment said reject, the comment was rejected. So if you accept, you end up accepting the motion. So you are now in the opposite position. If you really want to do what the motion does, you need to take Number 1, 90A-3 or 90A-4. Carl here can take 90A-3 which will solve the problem.

MR. CLARY: But they're all related motions. So the action on any of these are resolved in the same action. So at the end of the day, or beginning of the night, depending on your point of view, and it may well be into the night before we get this done, we would return to the existing text is what the result of these motions would do.

MR. HIRSCHLER: Let the record reflect that you said that.

MR. CLARY: At that, I think we're back -- Thank you for being patient. We're back to Number 3.

MR. MARK GILINSKI: Mark Gilinski with Cater Ruman Associates, Consulting Engineers, and I speak in favor of the motion and declare I speak against putting

smoke dampers in the -- Okay.

There's been many good points made. I do not need to repeat many of those. One point I would like to express is that if we, if this was to go -- Remember, all that's being done is adding the word smoke to the requirements for smoke, for fire dampers in shafts. There's no additional information on how to operate these smoke dampers now.

The requirement for operating smoke dampers currently is shall be controlled by an automatic alarm initiated device. Does this mean a full coverage smoke detection system as was indicated in the model? That kind of makes sense, I suppose, but not necessarily. Or how about a fire suppression system water flow switch? That sounds like that would work, too. But now that has no relationship to smoke. What about heat detector? Again, automatic alarm initiated device, no relation to smoke.

Then the question that had come up regarding the exhaust ducts, the only exception to allowing fire dampers and then supposedly fire and smoke dampers is for a dedicated exhaust shaft, you know, a single exhaust shaft. You don't have to have a fire damper at the

bottom if there's no other penetration, just dedicated to that one exhaust, or the sub duct concept where you have a riser and several, as you go up, several sub ducts that enter that duct. Those are the two exceptions for fire dampers currently. Therefore, smoke dampers would still be allowed almost any branch duct hitting a real shaft. And, again, how would those be activated if they were, indeed, a high moisture duct system? Would you put a duct detector in the duct? You certainly couldn't use a smoke detector at that high moisture space itself.

So, in general, I would say that if we do need to progress towards smoke dampers, which I don't think we do, I think that this right now is not ready for prime time. Additional work needs to be done to determine how these smoke dampers would be operated.

And one more point on some additional information that was pointed out before is the cost of these is going to be very high. I believe that the cost model that identified there would be insignificant cost did not include this operational, although, like I said, we could do it with an existing flow switch probably. So, perhaps, there isn't a lot of cost impact there, but that's probably not the right way to do things. Probably

1 the right way to do things would, indeed, be the full
2 coverage smoke detection system, and, therefore, cost
3 impact would be high.
4 Thank you. I urge you to vote for the motion
5 and not provide smoke dampers without further
6 substantiation and information on control.
7 MR. CLARY: Microphone Number 5, please.
8 MR. GEORGE MILLS: George Mills, and I work for
9 the Joint Commission, and I am in favor of the motion.
10 As an AHJ in health care, we're very concerned
11 about many things, but primarily patient safety. Mr.
12 Erickson gave you a great example of the reasons why we
13 should accept this motion, to prevent the disruption of
14 the duct system in our health care that would potentially
15 affect our patient care delivery.
16 There has been no history of problems with our
17 shafts that would require us to be putting smoke dampers
18 in there. The fire dampering system has been working.
19 We have seen in health care since 1988 when we had 355
20 fire-related deaths a year to be reduced to down single
21 digits. In fact, from 1999 to 2002 we averaged one
22 person in a fire-related death in the health care
23 environment. So we see no need to add another layer of

protection with smoke dampers on these existing fire damper systems.

I would encourage you as an AHJ in health care, we credit roughly 6,000 hospitals and 15,000 other health care entities, we are seriously in favor of this motion on the floor. Thank you.

MR. CLARY: Microphone Number 2, please.

MR. BOB VAN BECELAERE: Bob Van Becelaere. I represent AMCA. I'm speaking against the motion. I'm on the Technical Committee.

We reviewed the information that was presented and passed the proposal at a rate of 23 for and 2 against and 1 abstention. So the Technical Committee has reviewed this. They have reviewed it every time we have put it up, and they have always had a high majority. I think the worst we ever had is five people against the vote. So the technical experts on fire dampers and fire/smoke dampers and smoke control all voted for it.

I heard a comment that there's no place you can go in 90A and see how to design a smoke control system. There is a complimentary standard called NFPA 92A which talks about how to do smoke control systems.

The other comment I heard was that you don't

need smoke control if there's a sprinklered fire. I have personally witnessed two smoke tests with the sprinklered fire or two fire tests with the sprinklered fire, and every time the sprinklers went off the space in the corridors were filled from top to bottom with smoke. You couldn't have crawled out of those spaces and found an exit. You couldn't see your hand in front of your face. To say you don't need a smoke control system in sprinklered buildings is wrong. You need it as a complimentary action to prevent smoke from killing people. And I urge you to support the committee action. Thank you.

MR. CLARY: Microphone Number 5, please.

MR. FRANK VENOBERN: Frank Venobern, FT&T Consultants. I would like to address the issues of cost as pointed out by the coalition representative. In the Koffel Associates report, in the summary statements it identifies, I'll quote, it is not cost prohibitive to require them. The "them" they're referring to is the smoke dampers.

In this part I would like also to repeat what Mr. Koffel stated that the cost estimating information was done by an engineering firm and was included in his

report, not prepared by his staff.

When you read the report and go into the cost analysis documentation, I'll read a portion of it, "Fire/smoke dampers are assumed to use the area detection system whereby fire/smoke dampers are activated by the floor-wide smoke detection system indexed to the fire alarm system per International Mechanical Code 2009. Because the floor-wide smoke detection system and fire alarm system are independently required, the cost of these system are not counted towards the cost of the fire/smoke dampers."

So when you look at the analysis, that's based upon the work that the building has complete smoke detection, and, as a result, the smoke dampers do not require the installation of in-duct smoke detectors, the associated fire alarm circuitry and associated electrical circuitry or pneumatic air to operate the smoke damper associated to the fire alarm system interface. So that is a considerable cost piece of information that's not included in there, and as part of the summary it's stated that the cost is not prohibitive. I disagree with that point.

I would also like to address the issue of

inspection testing maintenance. I'm a member of the NFPA 72 Technical Committee on Testing and Maintenance. I would like to point out that while the issue of commissioning of fire detection alarm systems and all associated fire safety features within the building is currently being discussed in many other measures and standards, currently the requirements of NFPA 72 require that associated interface devices of the fire protection features of a building be tested at the same frequency of the associated initiating device, in this case the in-duct smoke detector or the associated building smoke detection system, requires those smoke dampers to be tested on an annual basis. This is current NFPA 72 criteria required. So now we're looking at an annual test, again, a substantial cost with the installation of these kinds of devices.

MR. CLARY: Thank you.

Microphone Number 4, please.

MR. RICK CABLY: Mr. Chairman and members of the NFPA, I'm Rick Cably of Building Safety Associates. This time I'm speaking on behalf of myself. I am speaking against the motion.

I'm a former building official, certified fire

protection specialist, and certified fire marshal. Building codes require fire/smoke dampers. The committee's action to require fire/smoke dampers at shaft penetrations is not unreasonable and does not require the installation of those combination fire/smoke dampers at every opening into a shaft. There remain provisions for 22-inch sub ducts for toilet and kitchen exhausts. Previously it was mentioned by another party that fire/smoke dampers would be required in those installations. That's not true. There are provisions for the sub ducts.

The cost and inconvenience of applying fire/smoke dampers to any application do not seem to be a reasonable tradeoff for the life safety of the occupants of the building. I would suggest that you consider very carefully rejecting this comment. Thank you.

MR. JIM LATHROP: Jim Lathrop, Koffel Associates, speaking for myself. I'm not speaking for or against this.

I'm standing at the for motions microphone because I'm going to discuss something that was said by somebody against. Being a member of the team that helped investigate the MGM Grand Hotel fire, I would like to point out that the majority of the problems there

1 involved smoke moving up through expansion joints and up
2 through stairs. Also, the major issue there also was the
3 fact that the corridor was used for supply air, obviously
4 pumping smoke into the rooms. We're not going to allow
5 that in hospitals. I just wanted to clarify that. Thank
6 you.
7 FROM THE FLOOR: Mr. Chairman, my name is
8 (inaudible), I'm a life safety consultant, in favor of
9 this motion.
10 And several individuals have mentioned marginal
11 cost. As an example, presently we're evaluating a
12 project, it has eight buildings. Each building is four
13 or five stories, and it is under NFPA 101, without any
14 smoke damper provision presently. Now, if this motion
15 passes, each floor has on average eight to ten
16 penetration shafts. Each penetration would require a
17 smoke damper, associated with the installation of a smoke
18 detector either within the duct system or throughout the
19 building. So the marginal cost provision needs to be
20 looked at, especially in light of occupancies such as
21 health care.
22 Also, the sub duct systems mentioned several
23 times cannot be in health care occupancies. We do not

provide sub duct. All the exhaust systems, for example, from toilet rooms, are ducted. As such, in an environment with moisture it's impractical to install smoke detection in that condition. Thank you very much.

MS. VICKY LOVELL: Vicky Lovell, President of Intercode, Incorporated. I'm a building code consultant representing the Air Movement and Control Association.

We were the ones that submitted the comment that contained the technical -- I'm speaking in opposition to the motion. We are the ones that submitted the report from Koffel and Associates as part of a comment that the committee accepted in principle. A number of statements have been made, and I would like to, hopefully, wrap some of the discussion up by giving some summary points.

First of all, smoke dampers do more than just stop the migration of smoke. They also stop the migration of air that may contain other hazardous materials, bio hazards, infectious diseases, things that we have come to understand in these days that we live in are also threats to human life that may not necessarily be related to the fire issue.

But the health care proponents today have given

compelling reasons why this proposal should be accepted. The comment, rather, should be accepted. We agree with this. We completely agree with that. In fact, that's why this proposal was modified significantly from previous proposals regarding fire and smoke dampers to actually provide exemptions for this requirement. Life Safety Code in Chapters 18, 19, 20 and 21 all having to do with new and existing health care facilities, ambulatory health care facilities, there's already a provision that exempts those occupancies from this requirement. We support that. We're not in objection to that.

In addition, this proposal also makes another exemption for any place a fire damper is exempted in NFPA 90, neither would a smoke damper be required. So this is a very, very diluted proposal to what this body has voted on in previous sessions. We ask you to consider those points.

It's interesting to note that the proponents of this proposal before you now say that there's been no substantiation, no loss history. The fact of the matter is this technology was born out of many, many fire- and smoke-related incidents where people actually succumbed

1 to the effects of smoke before they became affected by
2 the fire itself. In every credible organization today,
3 the National Fire Protection Association, the National
4 Association of State Fire Marshals, the Society for Fire
5 Protection Engineers, all point to the fact that smoke is
6 still a problem and it's not being particularly well
7 resolved in the codes and standards.
8 By way of a quick reference, a recent study in
9 2001 by NIST on the sublethal effects of smoke indicated
10 at home fires, even though only 3,000 people,
11 approximately 3,000 people die in home fires at that
12 time, they estimated over 600,000 people in those same
13 fire events were subjected to lethal, potentially lethal
14 and toxic levels of smoke. There's such a thing as long-
15 term effects that are not necessarily captured in body
16 bags and counting of the body bags.
17 As was mentioned before, we asked Koffel and
18 Associates to do this work for us, and we asked them to
19 do it without prejudice. We didn't want to give them any
20 directed vote or any specific direction on not only
21 non-sprinklered buildings, but also sprinklered
22 buildings, because, clearly, that's the direction we are
23 heading in fire protection today, is the very prevalent

use of sprinklers.

But it's well known that sprinklers do not stop the migration of smoke. They may control the burning rate and they make it a different kind of smoke, but they don't necessarily stop the migration of smoke.

This additional technology, this is far superior to just a fire damper by itself, is intended to continue this excellent record we have in terms of loss of life. If we are doing something right and there's millions of fire/smoke dampers in operation today, why would you want to change anything? This proposal helps maintain those requirements in place. Thank you. We encourage your rejection of this comment.

MR. JIM PETER: Jim Peter, Ken Kerry International, speaking on behalf of myself. I'm speaking in favor of the motion.

We're hearing a lot about the cost is not significant, it's minimal cost. We're hearing some information about needing smoke dampers for smoke control in health care occupancies. The only place we're allowed to exempt them is at smoke barrier walls when we are fully sprinklered and fully ducted and using quick response sprinklers. It doesn't have that provision for

eliminating at the shaft.

But back to the fact that we're saying the costs are minimal. And, yes, the report does show that we may have a positive benefit from using smoke dampers, however small it might be. But I would like to quote from an International Fire Marshals Association Quarterly Letter out this winter. An interesting article, well written. One of things it says is, "While the code has quadrupled in size in the past 25 years, the vast majority of the fire code deficiencies cited today were items that could be found as prior violations in the fire codes in the 1970s."

Adding volume to the book does not necessarily translate into improving fire or life safety. So you have to ask yourself, yes, we can keep adding stuff, but does it really benefit us? Are we getting anything for our bang for our buck? Let's stop and think before we need to spend more money. Thank you.

MR. BILL WEBB: Good morning. By name is Bill Webb, Webb Fire Protection Consulting. I call the question.

FROM THE FLOOR: Second.

MR. CLARY: We have a second on that. That's a

non-debatable motion. So we'll go directly to the vote which is to call the question. All in favor signify by raising your hands. All opposed, same sign. The motion carries.

We now immediately go to the motion before us which is motion to cease 90A-5 which is to accept Comment 90A-64. All in favor of the motion signify by raising your hand. All opposed.

I'm not going to call this one. We're going to go to electronic voting. You must have a white badge with the word Member on top to vote. I remind you to vote either 1, in favor of the motion, accept, or 2, opposed to the motion, reject. The motion on the floor is to accept Comment 90A-64. Please record your vote. Five seconds. The balloting is now closed.

And the motion passes.

Okay. Anything further on this document? Hearing none, we will move on to NFPA 204.

And thank you, Mr. Hammerberg.

The next report under consideration for this morning is that of the Committee on Smoke Management Systems. Here to present the committee report is Technical Committee Chair Randy Tucker of CCRD Partners

of Houston, Texas. The Committee Report can be found in the blue 2011 Annual Revision Cycle ROP and ROC. The certified amending motions are contained in the Motions Committee Report and behind me on the screen. We will proceed in the order of the motions presented.

Mr. Tucker.

MR. RANDY TUCKER: Mr. Chair, ladies and gentlemen, the report of the Technical Committee on Smoke Management Systems is presented for adoption and can be found in the 2009 Fall Revision Cycle Report on Proposals and the 2011 Annual Report on Comments. The Technical Committee published a report consisting of a partial revision of NFPA 204, Standard for Smoke and Heat Venting. The report was submitted to letter ballot of the Technical Committee and consists of 27 voting members. Ballot results can be found on Pages 204-2 to 204-9 of the Report on Proposals and Pages 204-1 to 204-5 of the Report on Comments.

The presiding officer will now proceed with the certified amending motions.

MR. CLARY: We will now proceed with discussion of certified amending motion in its sequence 204-1. Microphone Number 5.

MR. RICHARD SCHULTE: Rich Schulte, Schulte and Associates. I would like to make a motion to return the entire report back to the Technical Committee.

FROM THE FLOOR: Second.

MR. CLARY: We have a second. Mr. Schulte.

MR. SCHULTE: I'll be brief. I think this is pretty straightforward. For 35 years we have argued over whether we should be using roof vents in sprinklered buildings. Two years ago that issue was resolved by the NFPA 13 Committee, and NFPA 13 now contains provision for the use of roof vents in sprinklered buildings.

The substantiation for those provisions reads as follows. "The intent of the standard is that roof vents and draft curtains should not be used in conjunction with storage protection." That's pretty straightforward. So I believe the issue has been solved or been resolved.

Also, I would like to point out a comment made by a member of the Smoke Management Committee, by Mr. Michael Dillon of Dillon Consulting Engineering, Inc. Mr. Dillon said in a comment, this is back in 2009, "Document prematurely and improperly requires and relies upon unproven methods of calculation for the

effectiveness of smoke and heat vents in the presence of automatic water-based sprinkler protection systems. It also relies on calculations of questionable accuracy determining the activation times for the vents and sprinklers." I think that's pretty straightforward.

Also, the Smoke Management Committee has yet to address Mr. Dillon's comments. I think I'll leave it at that.

MR. CLARY: Mr. Tucker.

MR. TUCKER: The committee had reviewed -- We actually at the 2010 Association meeting, we returned it to committee and reviewed the suggestions on smoke dampers or smoke relief with sprinklered buildings. We came back with some suggestions from three of the people who were present at the meeting discussing what their questions were with the system. The committee came up with the result that is shown now in the 2011 ROC. It's actually on Page 2000-4 where you see the committee comments.

The committee is not offering any suggestions specifically on this. I would like to have one of the members of the committee get up and talk about that.

FROM THE FLOOR: Thank you, Mr. Chairman. Jeff

(inaudible). Speaking against the motion. I'm a member of the Smoke Management Committee for NFPA. I do not speak on their behalf. I have no vested interest in this specific issue, other than being a member of the committee and chairing the ASHRAE Smoke Committee.

It's obviously clear that returning the document comment is based upon our new Chapter 11 included within the document that deals with vents in sprinklered buildings. If you want to follow along, it's on Page 204-4. Within that section you'll see a new Section 11.1 that states, I'll quote, "Where provided, the design of venting for sprinklered buildings shall be based on an engineering analysis acceptable to the AHJ demonstrating that the objectives are met." Annex F.3 includes specific objectives that those analyses should be met. The remaining sections of that Chapter 11 just include additional design details.

I would like to further state that the committee proposal was developed through a consensus process that combines several proposals. All ballots were returned. 24 ballots were returned affirmative. Three ballots were not returned.

Buildings are being designed with sprinklers

and heat vents in them currently, and there needs to be some guidance for those designs, and our committee goal was to try to develop some of the specific guidelines for that.

And I urge everybody to reject this motion, to go with the committee's thoughts that through a consensus process we developed something that we thought made sense on guidance. Thank you.

MR. CLARY: Microphone Number 2.

MR. DICK DAVIS: Dick Davis, FM Global, speaking in opposition to the motion. I am a member of the Smoke Management Committee, also a member of the task group that worked on these proposed changes. However, I'm not speaking for the committee.

As noted, this was returned to the committee a year ago, and I would like to remind everyone that 204 does not require the use of heat and smoke vents. It specifically says in the scope that the standards shall not specify under which conditions venting is to be provided.

And Mr. Schulte is correct, this argument has been going on for over 35 years, but at the end of the day the problem is that the codes continue to require the

use of smoke and heat vents and draft curtains in sprinklered buildings, including IBC and IFC, and these installations continue to go in regardless of what 204 has or has not said over the last 35 plus years.

We need to provide guidance. Many of us are concerned about the potential adverse effect of smoke and heat vents and draft curtains on sprinkler protection. One of the key elements that we added that Jeff mentioned, we changed the word performance to engineering. We made a reference to NFPA 13. We also added very specific guidance on the location of draft curtains with respect to aisle spacing. This is a requirement to provide draft curtains in IBC or IFC, but there is no requirement about where the draft curtain goes.

We have submitted large, full scale fire test data to show that the location of the draft curtain is very critical and it can cause an excessive number of sprinklers to operate if they're improperly located. The proposed changes in this document address that. So some of us who are concerned about sprinkler protection and the adverse effects from this, if you accept this proposal, if you don't reject this, we're going to shoot

ourselves in the foot, we're going to waste another year in getting out this guidance. So I urge you to reject this proposal.

MR. CLARY: Thank you.

MR. RICH SCHULTE: Rich Schulte, Schulte and Associates.

Simply because the International Building Code and the International Fire Code include requirements for roof vents and sprinklers in buildings doesn't mean NFPA should create a conflict between NFPA 13 and NFPA 204. That's what basically adoption of NFPA 204 would do, would create a conflict. I don't think NFPA wants to do that.

Next, again, we need to take a look at how do we do this. Mr. Dillon's comment which I just read basically says we have no procedure to be able to do this, so we have no procedure, no validated procedure to implement the performance analysis that NFPA 204 requires.

Again, I would suggest that you support this motion. Thank you.

MR. CLARY: Microphone Number 4, please.

MR. BILL KOFFEL: Bill Koffel, Koffel

Associates, a member of the committee, but in the committee I'm representing Smoke Task Group and I'll be speaking on their behalf. I'm also a member of the NFPA 13 Sprinkler Discharge Criteria Committee, but I'm not speaking for that committee. I'm speaking against the motion.

You have heard this creates a conflict with NFPA 13. I'm not sure what that conflict is. The maker of the motion is referring to something in the substantiation, but there clearly is language in NFPA 13 that addresses when you have smoke vents in a building that is protected in accordance with NFPA 13. In fact, this committee felt strongly enough to make sure there was a reference to NFPA 13. We discussed in the committee whether we should be referencing NFPA 13 in this language, and the committee said we need to reference it to make sure that someone does not violate the provisions of NFPA 13. So there is, in my opinion at least, coordination between those two documents.

I would also note that the proponent is telling us this is an ICC/NFPA issue. I will offer to you that there are provisions in NFPA documents that allow or use smoke vents as a compliance strategy in sprinklered and

non-sprinklered buildings. So this is not just an ICC/NFPA issue.

I encourage you to vote against the motion.

MR. CLARY: Mr. Tucker, any concluding comments?

MR. TUCKER: No.

MR. CLARY: Then at that we're going to the vote. Again, this is to return the entire document to the committee. So all in favor of the motion please raise your hands. All opposed, same sign. The motion fails.

MR. TUCKER: Thank you very much.

MR. CLARY: Thank you, Mr. Tucker.

The next report under consideration this morning is that of the Technical Committee on Record Protection. Here to present the Committee Report is Technical Committee Member David Hague of Liberty Mutual, Weston, Massachusetts. The Committee Report can be found in the blue 2011 Annual Revision Cycle ROP and ROC. The certified amending motions are contained in the Motions Committee Report and behind me on the screen. We will proceed in the order of the motion number presented.

Mr. Hague.

MR. DAVID HAGUE: Mr. Chair, ladies and gentlemen, the report of the Technical Committee on Record Protection is presented for adoption and can be found in the Report on Proposals and Report on Comments for the 2011 Annual Meeting Revision Cycle. The Technical Committee has published a report consisting of a partial revision of NFPA 232, Standard For the Protection of Records. The report was submitted to letter ballot of the Technical Committee that consists of 26 voting members. The ballot results can be found on Pages 232-1 to 232-30 of the Report on Proposals and Pages 232-1 to 232-7 of the Report on Comments.

The presiding officer will now proceed with the certified amending motions.

MR. CLARY: Thank you, Mr. Hague.

We will now proceed to the discussion on the certified amending motions on NFPA 232. The first one will be 232-1. It looks like Microphone Number 5.

MR. MARCELO HIRSCHLER: My name is Marcelo Hirschler for GBH International. I'm speaking on behalf of the North American Flame Retardants Alliance. I hereby move to accept Comment 232-35.

MR. CLARY: Do we have a second?

FROM THE FLOOR: Second.

MR. CLARY: Dr. Hirschler, please proceed.

MR. MARCELO HIRSCHLER: The protection of records is being very carefully considered by using mostly products in those areas that are extremely low combustibility, and that is very wonderful because that's what should be done because we are dealing with something that needs to be protected properly. When we get to dumpsters, they say dumpsters or compactors for bulk collection of trash or recyclable paper shall be constructed of metal with metal covers, that's wonderful, or plastic covers. Plastic covers don't have any requirement.

So this comment says if the plastic covers are used indoors, and we're talking very large dumpsters, they should be treated the same way that NFPA 1, the Fire Code, treats the large dumpsters by having the requirements based on the calorimeter, and that's all the detail they show there. I didn't invent that. That's already identical to what we have in NFPA 1.

We're talking of very sizeable dumpsters here. We're talking about a plastic material that, if we don't put requirements in there, what is being used is highly

combustible, highly flammable polyethylene. That's the typical material used for dumpsters, if you don't put a requirement in there.

Note, one of the committee members who happens to sit on the Standards Council disagreed with the committee and supported my comment. Thank you very much.

MR. CLARY: Thank you.

Mr. Hague, any comments from the committee?

MR. HAGUE: Yes. The committee felt that the plastics did not offer a significant additional hazard and voted accordingly.

MR. LARRY VARN: I'm Larry Varn, Pierce Atwood, representing Iron Mountain. I speak in opposition to the motion.

I also served on that Technical Committee during the last revision cycle, although I don't purport to speak and I'm not authorized to speak on behalf of the committee. But I remember well the discussion of this proposal which, like all of them, was taken seriously.

In addition to Mr. Hague's comment, the committee also noted that in the adjacent sections of the standard there are already significant protection requirements around dumpsters, whether they're inside the

building or in the loading dock area, including sprinkler protection and firewall protection. So it's not as if the dumpster issue is sort of given free reign.

I can also tell you I have either investigated or reviewed probably every fire incident in this industry for the last 15 years. We have never had a problem with the dumpster. We have had problems, but not with the dumpster.

Put the thing in context. Some of these large buildings will hold upwards of 25, 30,000 tons of paper inside cardboard boxes. The little bit of trash that accumulates in the dumpster or what the lid is made of is just insignificant in relation to the real fire hazard which is why in the last cycle, as a result of a whole series of very large fire tests, specific provisions for sprinkler protection for these facilities was inserted in the latest edition of NFPA 13 which is also now cross-referenced to 232 in the committee report.

Lastly, on the issue of dumpsters, in the real world the way trash collection works is you engage in a contract with a trash firm and they supply the dumpsters. You don't tell them what dumpsters you want them to supply. If NFPA wants to address the issue of dumpsters,

then find the right book, deal directly with trash and dumpster movement, and not put it on a specific industry to try to control it.

MR. WARDE COMEAUX: My name is Warde Comeaux, Fire Protection International, speaking in opposition to the proposal. I also am a member of the NFPA 232 Committee. I do not speak, I do not represent them in this action.

I agree with Mr. Varn. He kind of stole my thunder in that he referenced everything that I had noted concerning the protection of it. So I let it go at that. Thank you.

MR. CLARY: Thank you.

Mr. Hague, any final comments?

MR. HAGUE: I have no further comments.

MR. CLARY: We'll move directly to the vote. This is to accept Comment 232-35. All in favor of the motion please signify by raising your hand. All opposed, same sign. The motion fails.

Next is sequence 232-2.

MR. MARCELO HIRSCHLER: Thank you, Mr. Chair. My name is Marcelo Hirschler for GBH International, representing the North American Flame Retardants

Alliance. By the way, just a quick comment. The North American Flame Retardants Alliance used to be the American Fire and Safety Council, same organization, changed names.

I hereby move to accept Comment 232-38.

MR. CLARY: Do we have a second?

FROM THE FLOOR: Second.

MR. MARCELO HIRSCHLER: Thank you. I hope the audience will see this as a very simple issue. We spent a significant amount of time talking about NFPA 90A. I happen to sit on the committee. I'm not speaking for the committee, but I happen to sit on the committee. 90A deals with air conditioning and with the movement of air, flame and heat and smoke through buildings. And what this comment would do would be to add that air handling equipment needs to deal with passage of heat, fire or smoke from one area to another in accordance with 90A.

The committee said there's no evidence that smoke does anything to records. That is flabbergasting. The smoke doesn't do anything to paper? Smoke doesn't do anything to paper? Smoke doesn't do anything to computer disks? I cannot believe the committee believes that. 90A controls the passage of heat and smoke, and I urge

you to support this small change. Thank you.

MR. CLARY: Mr. Hague, would you like to offer the committee's position?

MR. HAGUE: None other than the committee voted overwhelmingly 25 to 1 to reject the comment.

MR. CLARY: Thank you.

It looks like Microphone Number 3.

MR. JONATHAN LEVIN: Jonathan Levin, representing Liberty Mutual.

I disagree wholeheartedly with the committee statement. As Mr. Hirschler said, smoke does not cause damage to documents? There are actually companies out there who specifically restore smoke-damaged documents. If smoke did not cause damage to documents, these companies wouldn't exist.

This chapter deals with the protection of archives. 232 defines an archive material as necessary to perform current operations. If these are necessary to perform current operations, would you want to put them, make them susceptible to smoke damage?

I would suggest you support this motion. Thank you.

MR. CLARY: Microphone Number 5.

MR. HOWARD MARSHALL: I'm Howard Marshall from FM Global. I'm speaking in favor of the motion.

FM Global's position is certainly that records are in forms other than paper, certainly electronic media, certainly you can have microfiche, microfilm materials. All of these would be susceptible to the non-thermal byproducts of combustion. And based on that point, we definitely ask the body to consider voting for this motion.

MR. CLARY: Mr. Hague, final points?

MR. HAGUE: Nothing further, Mr. Chairman.

MR. CLARY: Thank you.

We will go directly to the vote on 232-2 which is to accept Comment 232-38. All in favor of the motion signify by raising your hands. All opposed, same sign. That motion passes.

Do we have anything further on this document? Okay. Thank you.

Thank you, Mr. Hague.

MR. HAGUE: Thank you, Mr. Chairman.

MR. CLARY: An important announcement from the Chair. We will be taking a ten-minute break. It is now noon. That means 12:10. There's a vendor outside which

can provide fine refreshments. This will be our final planned break for the rest of the session. So, again, ten minutes. Thank you.

At 12:04 p.m., the meeting recessed)

REPORTER'S CERTIFICATION

I hereby certify that the foregoing 163 pages contain a true and correct transcript of all my stenographic notes to the best of my ability taken in the of the NFPA Association Technical Meeting held in Boston, Massachusetts, on Wednesday, June 15, 2011.

CSR NO. 114893

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