Report of the Committee on Airport Facilities

Gene E. Benzenberg, Chair
Alison Control Inc., NJ [M]

Dennis C. Kennedy, Secretary
Tyco Suppression Systems, WI [M]
(Alt. to Christy J. Marsolo)

Michael E. Aaron, The RJA Group, Inc., IL [SE]
Thomas G. Burk, Federal Express Corporation, TN [U]
David J. Burkhart, Code Consultants, Inc., MO [SE]
Bruce G. Carpenter, AERO Automatic Sprinkler Company, AZ [IM]
Rep. NFPA Fire Service Section
James Devonshire, Buckeye Fire Equipment Company, TX [M]
James R. Doctorman, The Boeing Company, KS [U]
Rockwood J. Edwards, Schirmer Engineering Corporation, MA [I]
Scott Enides, S.R.I. Fire Sprinkler Corporation, NY [IM]
Rep. National Fire Sprinkler Association
L. Matthew Gwinn, Atkins Hanscomb Faithful & Gould, GA [SE]
Donald C. Helsel, Pro Technologies Inc., GA [IM]
Elwin G. Joyce, II, Eastern Kentucky University, KY [E]
Rep. International Fire Marshals Association
Michael J. Kemmis, Qantas Airways Limited, Australia [U]
Rep. Fire Protection Association Australia
Kiran C. Kochhar, US Army Corps of Engineers, VA [U]
L. M. Krasner, FM Global, MA [I]
Keith C. Kremkow, Marsh USA Inc., IL [I]
Richard J. Louis, Port Authority of New York & New Jersey, NY [E]
Rep. Airports Council International-North America
Christy J. Marsolo, Tyco International Ltd., GA [M]
John J. O'Sullivan, British Airways, PLC, United Kingdom [U]
Maurice M. Pilette, Mechanical Designs Ltd., MA [SE]
Jack Poole, Poole Consulting Services, Inc., KS [SE]
Randy D. Pope, Burns & McDonnell Engineering Company, MO [SE]
Robert W. Rees, Sunland Fire Protection, Inc., NC [IM]
Rep. American Fire Sprinkler Association
Robert Saunders, Wasatch Design Consultants, UT [SE]
Joseph L. Scheffey, Hughes Associates, Inc., MD [SE]
Joseph A. Simone, US Department of the Navy, DC [E]
Michael T. Skinner, Massachusetts Port Authority Fire/Rescue, MA [E]
Fred K. Walker, US Department of the Air Force, FL [U]

Alternates

Bruce L. Abell, US Army Corps of Engineers, VA [U]
(Alt. to Kiran C. Kochhar)
Nathaniel J. Addleman, The RJA Group, Inc., TX [SE]
(Alt. to Michael E. Aaron)
Dennis C. Banschbach, GE Insurance Solutions, IL [I]
(Voting Alt. to GEIS Rep.)
Delbert R. Chase, Jr., Federal Express Corporation, TN [U]
(Alt. to Thomas G. Burk)
Ronald B. Coker, Coker Engineering, TX [IM]
(Alt. to Robert W. Rees)
Ray W. Dillon, Summit Fire Protection, MN [IM]
(Alt. to Scott Enides)
Kevin M. Green, Schirmer Engineering Corporation, CA [I]
(Alt. to Rockwood J. Edwards)
John E. Loehle, US Air National Guard, MD [U]
(Alt. to Fred K. Walker)
Danny L. Luey, Port Authority of New York & New Jersey, NJ [E]
(Alt. to Richard J. Louis)
Robert C. Merritt, FM Global, MA [I]
(Alt. to L. M. Krasner)
Terry Schultz, Code Consultants, Inc., MO [SE]
(Alt. to David J. Burkhart)
Robert J. Tabet, US Department of the Navy, VA [E]
(Alt. to Joseph A. Simone)
Alison J. Wakelin, Hughes Associates, Inc., MD [SE]
(Alt. to Joseph L. Scheffey)

Nonvoting

Thomas J. Lett, Albuquerque Fire & Safety Associates, NM [SE]
(Member Emeritus)

Staff Liaison: **Mark T. Conroy**

Committee Scope: This Committee shall have primary responsibility for documents on fire safety for the construction and protection at airport facilities involving construction engineering but excluding airport fixed fueling systems.

This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the front of this book.

The Report of the Technical Committee on **Airport Facilities** is presented for adoption.

This Report was prepared by the **Technical Committee on Airport Facilities**, and proposes for adoption, amendments to NFPA 415, **Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways**, 2002 edition. NFPA 415 is published in Volume 8 of the 2006 National Fire Codes and in separate pamphlet form.

This Report has been submitted to letter ballot of the **Technical Committee on Airport Facilities**, which consists of 29 voting members; of whom 20 voted affirmatively, 8 negatively after circulation of negative ballots (Aaron, Banschbach, Benzenberg, Joyce, Krasner, Kremkow, Saunders, and Walker), and 1 ballot was not returned (Helsel).

Mr. Aaron voted negatively stating:
I disagree with the Committee's action on 415-9 (Log #CP2). In my opinion, for a change of this nature, potentially affecting the life safety of airline passengers and crew, the issue was hastily decided. Insufficient consideration was given to the psychological impact on egress. I do not have much confidence in the reliability of a mobile foam suppression system for protection of the jet way. I think safety has been compromised for very little gain.

Mr. Banschbach voted negatively stating:
Technical support would be needed for the committee to consider this proposal 415-9 (Log #CP2). I have to vote negative.

Mr. Benzenberg voted negatively stating:
I have voted negative on the grounds that 415-9 (Log #CP2) (6.2.5) was brought to the Committee without any technical substantiation. This standard has been based on actual fire tests and engineering analysis and should not be changed without comparable data.

Mr. Joyce voted negatively stating:
Based upon a review of 415-9 (Log #CP2) and the fact this is an all or nothing ballot I am changing my ballot to NEGATIVE. This proposal was discussed in great detail at prior meetings and found to not be acceptable. A review of meeting minutes from 1996/97 will show this.

Mr. Krasner voted negatively stating:
I am voting negatively as a result of Log #CP2. The Committee did not think this through. Out of hand, with a split vote, it disregarded earlier work and extensive previous discussion. Although the proposal is recorded as a committee proposal, it is actually the work of one individual, submitted at the meeting, subsequent to the proposal closing date. As a result, "committee proposal" was the only way in which the material could be accommodated. With no prior notice, I did not have the ability to research the necessary previous information and hence could not prepare for discussion. While the primary issue is one of psychological impact to aircraft evacuees in the event of an emergency deplaning, adequate physical protection issues also exist.
Subsequent to the NFPA Airport Facilities Committee ROP meeting, I attended the NFPA ARFF Committee ROP meeting. At that committee meeting, I raised my concern about this issue and the Airport Facilities ROP action. It is the ARFF Committee that is responsible for standards dealing with emergency response at airports. Members of the committee include fire chiefs at several large U.S. airports (e.g., Boston Logan and LAX), national and international governmental rulemaking organizations for airports, national and international airline pilots association and airport operators. After some discussion, I asked the chairman for a show of hands as a gesture of support for a negative vote on this Log. That Committee agreed that the proposed change to NFPA 415 was a very bad idea as their minutes so reflect.

Mr. Kremkow voted negatively stating:

I am voting negatively since I disagree with the Committee Action for 415-9 (Log #CP2). I believe the emergency evacuation of the airplane will be slowed with windows in the loading walkways, because either people slowing down to look out the windows, or people hesitant to exit the airplane when they see fire. It would seem easier to "herd" people through a passageway without any external influences than when people can be distracted by what they see through the glass.

We should request the input of experts in behavior science before we make this major change, since "The purpose of this standard is to provide a reasonable degree of protection for life…". (Paragraph 1.2).

Mr. Saunders voted negatively stating:

Item 415-9 (Log #CP2), there is no support for the 15 ft distance or for foam applied under the bridge. Two systems where installed below the glass PLB's at Kuala Lumpur International Airport Berhad one system was as described in the proposal.

The other system was a monitor nozzle at the terminal (rotunda) end of the bridge. This system was simpler, had better ground coverage and pushed the fire away from the bridge head which is the most vulnerable part.

Mr. Walker voted negatively stating:

415-9 (Log #CP2) (6.2.5) is not supported by any technical substantiation. The changes to the previous fire resistance tests exception to include unrated jetways has no test data to support the design requirements. The proposal fails to address the human factor issues.

Mr. Kochhar voted affirmative with the following comment:

Explanation for negative vote for Log #2: The architectural enhancement creates a potential for loss of life.

Mr. Pope voted affirmative with the following comment:

To further support some comments I made during our discussions at the meeting in Miami concerning glazing in passenger boarding bridges, I would like to pass along the following to the Committee.

Flight Attendant Training is required by FAA Regulations to include the following:

Chapter 14, Section 5, 2015, C, (6)

(d) Passenger Boarding Duties and Procedures:

Ensure adherence to all regulatory and company requirements as applicable to specific aircraft.

The following are examples:

- Ensuring that a minimum number of required F/A's are at the assigned boarding station

(j) After Arrival Duties and Procedures:

1. Ensuring minimum number of required F/A's at assigned arrival station.

(k) Intermediate Stops:

- Determining minimum number of F/A's required to remain on board at intermediate stops when passengers remain onboard the aircraft
- Ensuring that F/A's are positioned at designated stations
- Implementing procedures to ensure passenger safety during fueling and defueling including procedures for emergency evacuation while parked at gate or ramp

1. Procedures for arming exit in emergency mode including the following:

- Ensuring that door is fully closed and locked
- Checking to see that threshold is free of debris
- Arming door either manually or automatically
- Verifying girt bar engagement

(1) Emergency Exit Drill.

Actual Arming of Each Type of Door Exit in Emergency Mode: Ability to arm exit properly by checking if threshold is free of debris; to arm door either manually or automatically; to verify girt bar engagement.

From NFPA 407

5.11 Aircraft Occupancy During Fuel Servicing Operations.

5.11.1 If passengers remain onboard an aircraft during fuel servicing, at least one qualified person trained in emergency evacuation procedures shall be in the aircraft at or near a door at which there is a passenger loading walkway, integral stairs that lead downward, or a passenger loading stair or stand. A clear area for emergency evacuation of the aircraft shall be maintained at not less than one additional exit. Where fueling operations take place with passengers onboard away from the terminal building, and stairways are not provided, such as during inclement weather (diversions), all slides shall be armed and the ARFF services shall be notified to respond in stand-by position in the vicinity of the fueling activity with at least one vehicle. Aircraft operators shall establish specific procedures covering emergency evacuation under such conditions for each type of aircraft they operate. All "no smoking" signs shall be displayed in the cabin(s), and the no smoking rule shall be enforced.

Mr. Scheffey voted affirmative with the following comment:

Comment on 415-2 (Log #14). The Committee should explicitly state the required performance criteria, either a spill of X size within X feet of the terminal; or, if test data is needed, what are the performance parameters of the test (e.g., UL 1709 for 15 minutes)?

415-1 Log #1 **Final Action: Accept in Principle**
(4.1.2)

Submitter: Jon Nisja, Northcentral Regional Fire Code Development Committee
Recommendation: In 4.1.2 remove reference to Class A Assembly occupancy. Replace with Assembly Occupancy Having an occupant load of more than 300.
Substantiation: NFPA 101 no longer uses the letter classifications for assembly occupancies. (see 12.3.3.3, LSC)
Committee Meeting Action: Accept in Principle
Revise 4.1.2 to read as follows:
4.1.2 Interior finish materials shall be limited to Class A or B regardless of the occupant load.
Add the following to A.4.1.2:
Interior finish Class A and B are described in NFPA 101®, Life Safety Code®.
Committee Statement: The original intent was to limit the interior finish of terminal buildings. NFPA 101 has been updated and the text in NFPA 415 does not make sense.

415-2 Log #4 **Final Action: Reject**
(4.1.5)

Submitter: Terry Schultz, Code Consultants, Inc.
Recommendation: Add new section as follows, renumber existings sections:
4.15.3. openings covered with tempered glass that are 50 ft (15 2m) or more from potential fuel spill points shall not be required to comply with 4.1.5.4.
Substantiation: The current requirements for protection of glazed openings in exterior walls of terminal buildings are without technical justification and are not necessary for many applications based on calculations of radiant energy from potential fuel spills.
The current requirements and Explanatory Text
A water spray system is required to protect glazed openings in exterior walls of terminal buildings that face an airport ramp and are less than 100 ft from a potential fuel spill point. Annex C provides additional information on requirements for protection of glazed openings. Section C.1 recommends against the use of glazed openings with 100 ft of potential fuel spill point. the rationale for this recommendation is that, “the radiant heat release from a serious fuel spill fire can be expected to break glass windows up to 75 ft (22.9 m) away and cause ignition of combustible materials within the building. “Note that no substantiation, reference, or technical justification is provided for this assertion. The explanation is also inconsistent without the body of the document that requires protection of glazed openings that are less than 100 ft from a potential fuel spill point while the explanatory text states that glass windows can be expected to break only up to 75 ft from a fire location. While this discrepancy could be based on the assumption that a fuel spill 100 ft from a terminal building may spread towards the terminal building, the assumption would be inconsistent with the drainage requirements in Chapter 5.
The purpose of the water spray system is not clearly articulated in Annex C. Paragraph 2 of Section C.1 provides that the concern regarding glazing with 100 ft of a potential fuel spill point is ignition of combustibles within the building Paragraph 4 then states that,”the presence of automatic sprinkler protection in the airport terminal building would be expected to control a fire initiated in the building due to an exposure fire. “ If the ignition of combustibles inside of the building is “the concern” and fires initiated within a terminal building are controlled by the automatic sprinkler system in the terminal building, then the water spray system on the exterior of the building is unnecessary.
Paragraph 3 of Section C.1 provides an explanation of what the water spray system is and is not intended to do. The water spray system is intended to,” provide a period of time for the safe egress of building occupants in the vicinity of the exposed window area,” but the water spray system, “is not intended to provide a safe refuge area for occupants.” No information is provided on if the required water spray system is capable of providing the intended performance.
Code History
NFPA 415 and its predecessors have been reviewed back to 1982. In that time period no substantive changes have been made to the requirements for protection of glazed openings. No relevant history is available in that time period that provides additional information or justification for the current requirements.
Analysis of Radiant Exposure
The radiant heat flux to the exterior wall of a terminal building has been calculated using the Engineering Guide to Assessing Flame Radiation to External Targets from Pool
Fires [1]. Radiant heat fluxes have been calculated using the Point Source Model and the Detailed Shokri and Beyler Method, each with a safety factor of 2.
Based on recommendations within the Guide, the Point Source Model is used for radiant exposures of less than 5 kW/m 2 and the Detailed Shokri and Beyler Method is used for radiant exposures of greater than 5 kW/m 2 . Where the calculated heat flux from one method was less than 5 kW/m 2 and the calculated heat flux using the other method was greater than 5 kW/m 2 , the more conservative value was used. The heat flux was calculated vertically at the point of maximum heat flux exposure.
The fire size for various fuel spills were calculated for Jet-A (Kerosine), JP-4 and JP-5 based on data from the SFPE Handbook of Fire Protection Engineering [2]. The following table outlines the mass rate and heat of combustion for each fuel analyzed:

FUEL	MASS LOSS RATE PER UNIT AREA ($kg/m^2.s$)	HEAT OF COMBUSTION (kJ/kg)
Jet-A (Kerosene)	0.039	43,200
JP-4	0.051	43,500
JP-5	0.054	43,000

The requirements for aircraft fueling ramp drainage limit the size and location of fuel spills. The proposed new code section does not apply to potential fuel spill locations closer than 50 ft from glazed openings in terminal buildings. A fuel spill occurring at 50 ft from a glazed opening in a terminal building is not expected to travel towards the terminal building, because of the ramp slopes required by Section 5.1.1.
A variety of fire sizes have been investigated depending on the fuel spill scenario. Fuel spills ranging from 10 ft square to 30 ft square have been investigated along with a fuel spill that is nominally 10 ft wide by 50 ft long. The rectangular fuel spill is investigated based on a fuel spill starting at 50 ft from a terminal building that travels towards a drain located 100 ft from a terminal building.
The heat flux required to break glass will vary depending on the type of glass used. Experiments indicate that a radiant heat flux greater than 16 kW/m 2 is required to break tempered glass [3].
The following table summarizes the results of the heat flux calculations for various fuel types and fire configurations.

See Table on the next page

The results outlined above show that tempered glass located not less than 50 ft from the jet fuel fires up to 25 ft square would not be expected to break. For JP-4 and JP-5 fires located 50 ft from tempered glass, it would take 30 ft square fire to have the potential to break the glass. Note that such a large fuel spill would not be expected based on the drainage requirements of NFPA 415.
The results of the analysis above indicate that the protections currently required by Section 4.1.5.3 are not necessary where tempered glass is used and potential fuel spill points are 50 ft or more from glazed openings. The proposed new code section refines the current requirements for protection of glazed openings in terminal buildings using accepted calculation methods with appropriate safety factors.
References
1. Engineering Guide to Assessing Flame Radiation to External Targets from Pool Fires, Society of Fire Protection Engineers, Bethesda, MD, June 1999.
2. Babrauskas, V., Fire Sizes, in The SFPE Handbook of Fire Protection Engineering, Third Edition, DiNenno, P.J.,ed., National Fire Protection Association, Quincy MA, 2002, p. 3-221.
3. Mowrer,F.W., Window Breakage induced by Exterior Fires, NIST-GCR-98-751, National Institute of Standards and Technology, June 1998, pp. 14-15.
Committee Meeting Action: Reject
Committee Statement: A spill could cause the actual fire to be closer to the building. Additionally, the committee feels that rather than basing a decision on empirical formulas and hypothetical calculations, actual fire testing should be done in order to support decreasing this requirement to 50 feet.

FUEL	LENGTH OF SPILL (feet)	WIDTH OF SPILL (feet)	DISTANCE FROM CLOSEST EDGE OF FIRE TO TERMINAL BUILDING (feet)	MAXIMUM RADIANT EXPOSURE TO EXTERIOR WALL (Kw/m^2)	GLASS BREAKS
Jet-A	50	10	50	6.7	No
Jet-A	10	10	50	1.8	No
Jet-A	15	15	50	6.0	No
Jet-A	20	20	50	8.8	No
Jet-A	25	25	50	11.6	No
Jet-A	30	30	50	14.3	No
JP-4	50	10	50	7.8	No
JP-4	10	10	50	2.3	No
JP-4	15	15	50	7.0	No
JP-4	20	20	50	10.1	No
JP-4	25	25	50	13.3	No
JP-4	30	30	50	16.3	Maybe
JP-5	50	10	50	8.0	No
JP-5	10	10	50	2.4	No
JP-5	15	15	50	7.1	No
JP-5	20	20	50	10.4	No
JP-5	25	25	50	13.6	No
JP-5	30	30	50	16.6	Maybe

415-3 Log #CP1 **Final Action: Accept**
(4.3.2, 4.3.2.1)

Submitter: Technical Committee on Airport Facilities,
Recommendation: Revise 4.3.2 to read as follows:
4.3.2 Flexible closures, canopies, wipers, and weather-sealing devices shall be subjected to the accelerated, weathering procedures specified in 4.3.2.1, after which they shall meet the requirements of 4.4.7 or 4.4.10 of this standard, as applicable.
4.3.2.1 Expose the specimens for 100 hours using the apparatus and procedure specified in AATCC Test Method 111A-1984, Water Resistance—Sunshine Arc Lamp Exposure with Wetting.
Substantiation: Accelerated weathering criteria no longer exists in NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.
Committee Meeting Action: Accept

415-4 Log #2 **Final Action: Reject**
(4.5.1.1)

Submitter: Jon Nisja, Northcentral Regional Fire Code Development Committee
Recommendation: Revise to read:
4.5.1.1 The airport terminal building with an occupant load of more than 300 shall be protected by an approved, supervised automatic sprinkler system in accordance with section 9.7 of NFPA 101, Life Safety Code.
Substantiation: As an assembly occupancy, the airport terminal must comply with all requirements found in a typical assembly, including fire sprinkler protection. Consistency with the Life Safety Code allows for continuity of enforcement.
Committee Meeting Action: Reject
Committee Statement: Current criteria are consistent with nationally recognized model codes. The committee agrees with that level of protection.

415-5 Log #5 **Final Action: Reject**
(4.5.2)

Submitter: David J. Burkhart, Code Consultants, Inc.
Recommendation: Add new text as follows:
4.5.2.4 Evacuation zones shall not be required to be enclosed by rated construction when an evacuation plan has been established.
Substantiation: NFPA 72 limits evacuation zones to areas enclosed by fire rated construction. An airport terminal can constitute a large open space where evacuating the entire space may not be desirable.
Committee Meeting Action: Reject
Committee Statement: Insufficient information on what would constitute an evacuation plan was provided. An evacuation plan may not be enforceable. The submitter did not elaborate on the equivalency of the evacuation plan to the evacuation signaling zone.

415-6 Log #7 **Final Action: Reject**
(4.5.2)

Submitter: David J. Burkhart, Code Consultants, Inc.
Recommendation: Add new text as follows:
4.5.2.5 When a Mass Notification system is installed, it shall be permitted to override the fire alarm system.
Substantiation: NFPA 72 now allows the interface with Mass Notification systems. Because of increased security and the potential for other threats to occupants, the security staff must be allowed to assess an emergency and make decisions contrary to an evacuation.
Committee Meeting Action: Reject
Committee Statement: NFPA 72 is being updated to address this topic. The NFPA 72 committee should take the lead on this topic.

415-7 Log #6 **Final Action: Reject**
(4.5.2.1)

Submitter: David J. Burkhart, Code Consultants, Inc.
Recommendation: 4.5.2.1 Delete section in its entirety.
Substantiation: The increased security and constant surveillance at airport terminal buildings make the need for manual stations unnecessary. Additionally, they can be used to cause confusion during a security breach.
Committee Meeting Action: Reject
Committee Statement: A pull station is a definitive means for a building occupant to notify the fire department.

415-8 Log #3 **Final Action: Reject**
(4.5.5.1)

Submitter: Jon Nisja, Northcentral Regional Fire Code Development Committee
Recommendation: Revise to read:
4.5.5.1 Main sizes shall be hydraulically calculated based on the total domestic and fire protection requirements. ~~Mains shall be not less than 8 in. (203 mm) in diameter except that laterals shall be permitted to be 6 in. (152 mm) in diameter if not over 200 ft (61 m) long.~~
Substantiation: Hydraulically calculated fire mains are sufficient to provide adequate fire water for the entire airport. An 8-inch main is far too large for smaller airports. Perhaps the removed language can be placed in the Annex for informational purposes.
Committee Meeting Action: Reject
Committee Statement: The Committee feels that the sizes of the mains and laterals are reasonable for fire flow based on the needs of potential fires at airports.

415-9 Log #CP2 **Final Action: Accept**
(6.2.5)

Submitter: Technical Committee on Airport Facilities,
Recommendation: Add new section 6.2.5 and renumber existing text accordingly:
6.2.5 Windows of unlimited size, shall be permitted in aircraft loading walkways where a local application foam system is installed under the entire loading walkway including the cab and rotunda. The foam system shall be automatically activated and designed to cover all areas extending a minimum of 15 ft beyond in all directions. The foam system shall meet the requirements of NFPA 11 or NFPA 16 and be supervised at a constantly attended location in accordance with NFPA 72.
Substantiation: Provides a requirement for the protection and use of a glass loading walkway where provided.
Committee Meeting Action: Accept

FORM FOR COMMENTS ON NFPA REPORT ON PROPOSALS
2007 ANNUAL REVISION CYCLE
FINAL DATE FOR RECEIPT OF COMMENTS: 5:00 pm EDST, September 1, 2006

For further information on the standards-making process, please contact the Codes and Standards Administration at 617-984-7249

For technical assistance, please call NFPA at 617-770-3000

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Log #: _____

Date Rec'd: _____

Please indicate in which format you wish to receive your ROP/ROC ☐ electronic ☐ paper ☐ download
(Note: In choosing the download option, you intend to view the ROP/ROC from our website; no copy will be sent to you.)

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Please indicate organization represented (if any) _____

1. (a) NFPA document title _____ **NFPA No. & Year** _____

(b) Section/Paragraph _____

2. Comment on Proposal No. (from ROP): _____

3. Comment recommends (check one): ☐ new text ☐ revised text ☐ deleted text

4. Comment (include proposed new or revised wording, or identification of wording to be deleted): (Note: Proposed text should be in legislative format; i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (~~deleted wording~~).

5. Statement of Problem and Substantiation for Comment: (Note: State the problem that will be resolved by your recommendation; give the specific reason for your comment, including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.)

6. Copyright Assignment

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I hereby grant and assign to the NFPA all and full rights in copyright in this comment and understand that I acquire no rights in any publication of NFPA in which this comment in this or another similar or analogous form is used. Except to the extent that I do not have authority to make an assignment in materials that I have identified in (b) above, I hereby warrant that I am the author of this comment and that I have full power and authority to enter into this assignment.

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Notice of Intent to Make a Motion (NITMAM)

Sequence of Events Leading to Issuance of an NFPA Committee Document

Step 1 **Call for Proposals**

▼ Proposed new Document or new edition of an existing Document is entered into one of two yearly revision cycles, and a Call for Proposals is published.

Step 2 **Report on Proposals (ROP)**

▼ Committee meets to act on Proposals, to develop its own Proposals, and to prepare its Report.

▼ Committee votes by written ballot on Proposals. If two-thirds approve, Report goes forward. Lacking two-thirds approval, Report returns to Committee.

▼ Report on Proposals (ROP) is published for public review and comment.

Step 3 **Report on Comments (ROC)**

▼ Committee meets to act on Public Comments to develop its own Comments, and to prepare its report.

▼ Committee votes by written ballot on Comments. If two-thirds approve, Reports goes forward. Lacking two-thirds approval, Report returns to Committee.

▼ Report on Comments (ROC) is published for public review.

Step 4 **Technical Report Session**

▼ *"Notices of intent to make a motion"* are filed, are reviewed, and valid motions are certified for presentation at the Technical Report Session. ("Consent Documents" that have no certified motions bypass the Technical Report Session and proceed to the Standards Council for issuance.)

▼ NFPA membership meets each June at the Annual Meeting Technical Report Session and acts on Technical Committee Reports (ROP and ROC) for Documents with "certified amending motions."

▼ Committee(s) vote on any amendments to Report approved at NFPA Annual Membership Meeting.

Step 5 **Standards Council Issuance**

▼ Notification of intent to file an appeal to the Standards Council on Association action must be filed within 20 days of the NFPA Annual Membership Meeting.

▼ Standards Council decides, based on all evidence, whether or not to issue Document or to take other action, including hearing any appeals.

The Technical Report Session of the NFPA Annual Meeting

The process of public input and review does not end with the publication of the ROP and ROC. Following the completion of the Proposal and Comment periods, there is yet a further opportunity for debate and discussion through the Technical Report Sessions that take place at the NFPA Annual Meeting.

The Technical Report Session provides an opportunity for the final Technical Committee Report (i.e., the ROP and ROC) on each proposed new or revised code or standard to be presented to the NFPA membership for the debate and consideration of motions to amend the Report. The specific rules for the types of motions that can be made and who can make them are set forth in NFPA's rules which should always be consulted by those wishing to bring an issue before the membership at a Technical Report Session. The following presents some of the main features of how a Report is handled.

What Amending Motions are Allowed. The Technical Committee Reports contain many Proposals and Comments that the Technical Committee has rejected or revised in whole or in part. Actions of the Technical Committee published in the ROP may also eventually be rejected or revised by the Technical Committee during the development of its ROC. The motions allowed by NFPA rules provide the opportunity to propose amendments to the text of a proposed code or standard based on these published Proposals, Comments and Committee actions. Thus, the list of allowable motions include motions to accept Proposals and Comments in whole or in part as submitted or as modified by a Technical Committee action. Motions are also available to reject an accepted Comment in whole or part. In addition, Motions can be made to return an entire Technical Committee Report or a portion of the Report to the Technical Committee for further study.

The NFPA Annual Meeting, also known as the World SafetyConference and Exposition®, takes place in June of each year. A second Fall membership meeting was discontinued in 2004, so the NFPA Technical Report Session now runs once each yearat the Annual Meeting in June.

Who Can Make Amending Motions. Those authorized to make these motions is also regulated by NFPA rules. In many cases, the maker of the motion is limited by NFPA rules to the original submitter of the Proposal or Comment or his or her duly authorized representative. In other cases, such as a Motion to Reject an accepted Comment, or to Return a Technical Committee Report or a portion of a Technical Committee Report for Further Study, anyone can make these motions. For a complete explanation, NFPA rules should be consulted.

The filing of a Notice of Intent to Make a Motion. Before making an allowable motion at a Technical Report Session, the intended maker of the motion must file, in advance of the session, and within the published deadline, a Notice of Intent to Make a Motion. A Motions Committee appointed by the Standards Council then reviews all notices and certifies all amending motions that are proper. The Motions Committee can also, in consultation with the makers of the motions, clarify the intent of the motions and, in certain circumstances, combine motions that are dependent on each other together so that they can be made in one single motion. A Motions Committee report is then made available in advance of the meeting listing all certified motions. Only these Certified Amending Motions, together with certain allowable Follow-Up Motions (that is, motions that have become necessary as a result of previous successful amending motions) will be allowed at the Technical Report Session.

Consent Documents. Often there are codes and standards up for consideration by the membership that will be non-controversial and no proper Notices of Intent to Make a Motion will be filed. These "Consent Documents" will bypass the Technical Report Session and head straight to the Standards Council for issuance. The remaining Documents are then forwarded to the Technical Report Session for consideration of the NFPA membership.

Important Note: *The filing of a Notice of Intent to Make a Motion is a new requirement that takes effect beginning with those Documents scheduled for the Fall 2005 revision cycle that reports to the June 2006 Annual Meeting Technical Report Session. The filing of a Notice of Intent to Make a Motion will not, therefore, be required in order to make a motion at the June 2005 Annual Meeting Technical Report Session. For updates on the transition to the new Notice requirement and related new rules effective for the Fall 2005 revision cycle and the June 2006 Annual Meeting, check the NFPA website.*

Action on Motions at the Technical Report Session. In order to actually make a Certified Amending Motion at the Technical Report Session, the maker of the motion must sign in at least an hour before the session begins. In this way a final list of motions can be set in advance of the session. At the session, each proposed Document up for consideration is presented by a motion to adopt the Technical Committee Report on the Document. Following each such motion, the presiding officer in charge of the session opens the floor to motions on the Document from the final list of Certified Amending Motions followed by any permissible Follow-Up Motions. Debate and voting on each motion proceeds in accordance with NFPA rules. NFPA membership is not required in order to make or speak to a motion, but voting is limited to NFPA members who have joined at least 180 days prior to the session and have registered for the meeting. At the close of debate on each motion, voting takes place, and the motion requires a majority vote to carry. In order to amend a Technical Committee Report, successful amending motions must be confirmed by the responsible Technical Committee, which conducts a written ballot on all successful amending motions following the meeting and prior to the Document being forwarded to the Standards Council for issuance.

Standards Council Issuance

One of the primary responsibilities of the NFPA Standards Council, as the overseer of the NFPA codes and standards development process, is to act as the official issuer of all NFPA codes and standards. When it convenes to issue NFPA documents it also hears any appeals related to the Document. Appeals are an important part of assuring that all NFPA rules have been followed and that due process and fairness have been upheld throughout the codes and standards development process. The Council considers appeals both in writing and through the conduct of hearings at which all interested parties can participate. It decides appeals based on the entire record of the process as well as all submissions on the appeal. After deciding all appeals related to a Document before it, the Council, if appropriate, proceeds to issue the Document as an official NFPA code or standard. Subject only to limited review by the NFPA Board of Directors, the Decision of the Standards Council is final, and the new NFPA code or standard becomes effective twenty days after Standards Council issuance. The illustration on page 9 provides an overview of the entire process, which takes approximately two full years to complete.