

FIRE MARSHALS

QUARTERLY



INTERNATIONAL FIRE MARSHALS ASSOCIATION • FALL 2009

Interior Finish & Decorations

By Jon Nisja

Many people, including fire marshals, inspectors, building officials, and persons selling the materials used in construction, are confused and tend to misapply the requirements for interior finish and decorative materials. Requirements for interior finish and decorative materials can be found in the model building, fire, and life safety codes.

Oftentimes the terminology and requirements are used interchangeably; this is an inappropriate application of the requirements and can lead to disastrous results. A study of most large life loss fires shows that improper flame spread ratings of interior finish and flame propagation of decorative materials are often the contributing factors to rapid fire spread and subsequent loss of life.

In order to properly apply the requirements of the model codes dealing with interior finish and decorative materials one must understand the terminology used and how the various codes address those issues.

Understanding Basic Terminology

One of the most difficult parts of understanding, interpreting, and applying interior finish and decorative materials provisions of the codes is to first get through all of the confusing terminology.

The fire code official must know the difference between flame resistant (used for decorative materials), fire retardant (used for construction materials), flame spread ratings (used for interior finish), and fire resistant ratings (used for fire-rated walls, barriers, and enclosures).

These terms are remarkably similar and horribly confusing. Then you add terms like flame proof, flame propagation, and flame retardant and things seem even worse.

On top of that some of these terms are used by one code but not the others. Other terms are used but not defined. Are you ready to pull your hair out yet?

Here is an attempt to sort out some of the confusion.

A **combustible material** (NFPA 101:3.3.29) is one that will ignite and burn. Examples of common combustible materials are items made of wood, paper, fabrics, and plastics.

Although the term combustible and its companion term “non-combustible” are used throughout many of the codes and standards, some of the model codes don't provide a definition. It is probably assumed that all users would understand the meaning of those terms. Unfortunately that may not be an accurate assumption.

These terms are often used to classify building construction type but they can also describe the combustibility character-

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Fire Marshals Quarterly

The mission of the International Fire Marshals Association is to aid in the preservation of life and property by advocating, promoting and providing leadership in the prevention or mitigation of fire, explosions and other related hazardous conditions.

IFMA was incorporated in 1906.

In 1927, IFMA became a membership section of NFPA.

Published quarterly as a service to the membership of the International Fire Marshals Association (IFMA).

The articles published in the Quarterly are the opinion of the authors and not necessarily the opinion of IFMA or NFPA.

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President's Corner



Jimmy Hill

As we move through midsummer, things have progressed rather well. The economy continues to be the focal point for many activities. Travel restrictions have slowed some of our faithful supporters for many events. However, last month we concluded another successful NFPA conference in Chicago. What a beautiful city. Sometimes we forget this is the city where fire has had a tremendous impact on reshaping its infrastructure. The magnificent skyline does not tell the story of what history lies within its boundary. Hence the local term "Second City" causes one to momentarily reflect on what the words really mean. We hope no other city ever has to experience a tragedy of the same proportions.

The battle continues for better fire safety in cities and communities across America. Once again we need to muster ourselves in Baltimore, Maryland, for the ICC code hearing in August. The stakes are high, as the residential fire sprinkler issue will be challenged once more. If the fire service and other proponents of fire sprinklers for single-family dwellings can prevail and get the provision moved to the building code, we can alleviate this annual battle. The fire protection to be afforded occupants in residential dwellings will then be permanent. However, this depends on firefighters having a strong presence for inclusion of the residential sprinkler requirements in the building code.

The Fourth of July fireworks safety campaign was a success. Thanks to the hard work of Lorraine Carli and the fine staff at NFPA and other stakeholders. The safety message was clear about the serious injuries and property damage caused each year by consumer fireworks. As in previous years, fireworks are all too easily obtained by the general public. Additionally, a new definition of consumer fireworks is emerging, such as the spark variety. This legalizes fireworks for purchase; however, they carry much of the same potential for dangerous consequences. Further there remains as much division between cities where enforcement is active and those where sales are permitted or lenient. Sadly, once again, a professional display was the scene of a tragic fireworks incident.

The second session of the Regional Code Conference for 2009 is coming up and I look forward to the spirited discussions and arduous work and professionalism displayed by members of each group.

Have a safe second half of 2009.

Executive Secretary's Report



Steven F. Sawyer

We would like to congratulate Jon Nisja on receiving the IFMA Meritorious Service Award and Art Black and Robert James for receiving the NFPA Standards Council Special Achievement Awards at the NFPA Conference & Expo in Chicago, Illinois, and Jim Burns for being awarded the R. Wayne Powell Excellence in Fire Prevention Award at the 2009 PARADE Conference. Congratulations to all for their achievements and service to fire prevention. See pages 16, 19, and 29.

IFMA had a very active schedule in Chicago. Thanks to the 21 chapters who attended the chapter presidents' meeting and to those making presentations and attending the events. See page 19.

THE PARADE Conference held on May 14–16, 2009, at the National Fire Academy was well attended. Thanks to the co-chairs and Becky Ryan for putting together a great conference. Resolutions were passed on residential sprinklers and novelty lighters. See pages 44 and 45.

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IFMA is looking for presentation for the NFPA Conference and Expo in Las Vegas, Nevada on June 7-10, 2010. If you are interested in make a presentation please submit a title, brief description, learning objectives, speaker name, address, and contact information to me by August 31st. If you have already submitted to NFPA and would like IFMA to sponsor please send me the information.

In many states the legislature is submitting legislation to remove the requirements for fire sprinklers in one- and two-family dwellings. This battle has been won and lost in some states. If you have new legislation being introduced, please let me know as NFPA is willing to assist in defeating legislative efforts.

Have a safe start to the school year.

Fire and Life Safety Educator of the Year Call for Applications

NFPA is seeking applications for the 2010 Fire and Life Safety Educator of the Year Award. The award provides a \$1,000 honorarium to the recipient and travel to the award presentation at the NFPA annual conference, and a \$1,000 donation to the recipient's fire department to support public education activities. Eligible fire and life safety educators work for a local fire department, use NFPA's Risk Watch®, Learn Not to Burn®, Remembering When™ or Fire Prevention Week materials in a consistent and creative way and demonstrate excellence and innovation in reaching out to the community.

Visit www.nfpa.org/educator. Mail application to the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169, Attention: Public Education/Educator of the Year Application. Or e-mail the application to education@nfpa.org. The application deadline is February 26, 2010.

Rolf H. Jensen Memorial Public Education Grant Call for Applications

NFPA is seeking applications for the 2010 Rolf H. Jensen Memorial Public Education Grant, funded by the RJA Group. The award provides a \$5,000 grant annually to a local fire department in the United States implementing a fire and life safety education program or campaign. Visit www.nfpa.org/Jensen. Mail application to the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169, Attention: Public Education/Jensen Application. Or e-mail the application to education@nfpa.org. The application deadline is February 5, 2010.



USFA Releases Report on the Fire Response to the Northern Illinois University Shooting

The United States Fire Administration (USFA) released a new technical report titled *Northern Illinois University Shooting*. On February 14, 2008, a former Northern Illinois University (NIU) graduate student walked onto the stage of a large lecture hall and began firing on startled students and faculty. The shooter, a 28-year old male, had a history of mental illness. He shot and killed five students and wounded 18, some critically. His suicide at the end of the brief attack brought the number of deaths to six.

The City of DeKalb Fire Department, the NIU Department of Public Safety, the Kishwaukee Community Hospital, and other mutual aid responders were prepared. They had practiced emergency drills together and coordinated their planning. They were familiar with the Incident Command System and had formally incorporated its use in their plans. The fire/EMS, university police, and university events management partners had worked together frequently in planned and unplanned events, so command and control procedures were well practiced. They also had studied official reports on the Virginia Tech shootings and had integrated those lessons learned into the University's and the City of DeKalb's emergency response plans.

"We as firefighters in this nation continue to witness the positive outcomes of emergency preparation, preplanning, practicing plans and executing the plans when an emergency occurs," said Acting U.S. Fire Administrator Glenn A. Gaines. "The Dekalb Fire Department demonstrates the fire service commitment to emergency preparedness for all emergencies through the study of lessons learned, and the application and practice of Incident Command and the National Incident Management System (NIMS)."

From every after-action report this potentially devastating situation was handled with the highest levels of skill and expertise. The multiagency cooperation in response in Dekalb was virtually a textbook application of Unified Command and the NIMS. The key element contributing to the success of operations was NIU had a very well-defined plan that was exercised routinely. University and local first response leadership made a commitment to prepare and train for such an event following the 2007 Virginia Tech shooting.

The USFA develops reports on selected major incidents throughout the country. The incidents usually involve multiple deaths or a large loss of property, but the primary criterion for deciding to write a report is whether it will result in significant lessons learned. Under this project, USFA also develops special reports addressing a variety of issues that affect the fire service such as homeland security and disaster preparedness, new technologies, training, fireground tactics, and firefighter safety and health.

For additional information regarding this report, or other USFA Technical Reports, visit the Publications section of the USFA Web site at www.usfa.dhs.gov.



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istics of decorative materials. The National Fire Protection Association (NFPA) further defines a combustible material as one that does not meet the definition of noncombustible or limited combustible.

Many of the traditional combustible materials, such as wood, paper, cardboard, and natural fabrics - such as cotton - burn at a rate of about 8000 BTUs per pound. By contrast many flammable liquids burn at a rate of about 12,000 BTUs per pound. Many structural components and decorative materials manufactured from synthetic and plastic materials burn at a rate very similar to flammable liquids (12,000 BTUs per pound).

A **noncombustible material** (101:3.3.331) is one that will not ignite, burn, support combustion, or release flammable vapors when exposed to fire or heat. Examples of common noncombustible materials include steel, concrete or masonry products, and ceramic materials. The basic premise is that noncombustible materials will not add to the fuel load or burning rate in a fire.

A **limited combustible material** (101:3.3.118) is one that does not meet the definition of noncombustible but has limited heat output (less than 3500 BTUs per pound). Examples of limited combustible materials include mineral board, fiberglass insulation, and painted gypsum wallboard.

While terms such as combustible, noncombustible, and limited combustible are often used to refer to structural materials, the term **flame resistant** refers to a process of making combustible materials, such as textiles and films, resistant to charring and decomposition (701, Appendix D-1.1). Flame resistant should never be used when referencing structural materials. Flame resistance can refer to a chemical treatment, process, paints, coatings, or the inherent properties of the material to resist ignition or to inhibit the propagation of flames. The term flame resistant is often used interchangeably with the term **flame retardant**; they essentially mean the same thing. Remember: flame resistant or flame retardant refers to treatments for decorative materials.

A **fire resistance rating** refers to a fire rating given in hours or minutes. Fire resistance ratings are based on ASTM Test E-117, also referred to as the time-temperature curve. Fire resistance ratings are often used in the model codes to designate a higher level of fire resistant construction to protect buildings or portions of buildings.

Fire retardant is a term that refers to chemical, paints, coatings, and other treatments used to make combustible building materials resistant to burning. An example of a fire retardant would be fire retardant treated (FRT) lumber. Remember: fire retardant refers to treatments for construction materials.

If someone uses a term **fireproof** or **flameproof** you can pretty much discount what they say as these terms have no practical or useful application. The closest thing to a fireproof material would be something that is noncombustible.

A **flame spread index** or **flame spread rating** is the relative measure of flame propagation over the surface of wall or ceiling materials. Wall and ceiling materials are also known as interior finish. The flame spread index or flame spread rating is determined by a test conducted in accordance with ASTM E-84. This test is



Photo 1 - Steiner Tunnel Test Apparatus

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conducted in apparatus known to and as the Steiner Tunnel.

Test Differences

The Steiner Tunnel Test apparatus has been around for several decades. It was originally designed to test flame propagation of wood-based materials.

Over the years our use of interior finishes have transitioned to synthetic materials, especially plastics and foams; questions have surfaced as to whether the Steiner Tunnel Test provided accurate ratings for materials that tend to melt and drip.

In the Steiner Tunnel Test, the wall or ceiling material is placed horizontally on top of a 25 foot long tunnel. A burner at one end injects a flame into the “tunnel” and a technician observes how far down the tunnel the flame travels.

As can likely be understood, a plastic or foam material suspended from the top of this tunnel can melt, drip, and fall away. Technically, this would pass the ASTM E-84 test since the flame is no longer spreading across the material as it is no longer there. People soon begin to recognize that melting, dripping plastics or foams are not a desirable fire condition regardless of their ability to pass a test that never contemplated their use.

Some of the model codes are moving towards either requiring a **Room Corner Test** or allowing it in lieu of the ASTM E-84 test. This test method is outlined in NFPA 286; materials are mounted on three walls of a compartment (excluding the wall that contains the door) and the ceiling.

A gas burner is placed in one corner flush against both walls and they are exposed to pre-established heat release rates for designated periods of time. The test apparatus collects the fire effluents and measures oxygen concentrations in the exhaust duct. These are used to determine total heat release and smoke release from burning material.

The Room Corner Test increases the levels of fire exposure in order to represent a growing fire. The second or higher exposure provides a more intense fire situation and the failing criteria relates to the prevention of flashover conditions. There is also a failure when the total smoke production reaches a certain level. The Room Corner Test is generally considered to be a more conservative test than the Steiner Tunnel Test (ASTM E-84) and is considered by many fire experts to provide a more realistic indicator of how materials will burn, especially synthetics, plastics, and foams.

Interior Finish

Materials placed on the walls or ceilings inside a room or compartment are considered interior finish. In addition some of the model codes require that the following materials be considered interior finish if they cover 10% or more of the wall or ceiling area; this is an exception to their normal treatment as decorative materials or furnishings:

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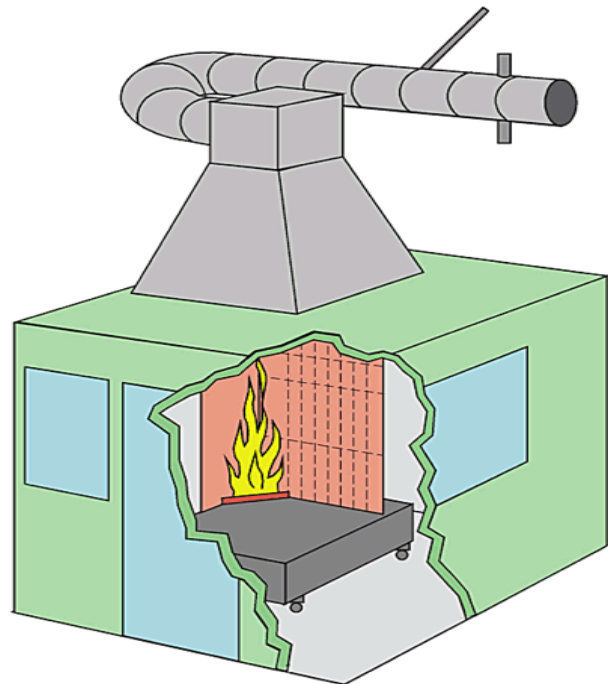


Figure 1 – Room Corner Test

Guide for Firewise developments is now available
"Safer from the Start" addresses development in wildfire-prone areas of the US

Wildfires that damage homes and businesses are increasing in severity throughout the country, as growth patterns put more homes and neighborhoods in areas naturally prone to fire. While the national Firewise Communities® program has long advocated action in existing communities to minimize fire hazards to homes, its new publication, Safer from the Start: A Guide to Firewise-Friendly Developments, seeks to help create Firewise communities from the ground up.

The guide, now available on the "Resources for the Homeowner" page at the Firewise Web site provides developers of new communities and residents of existing community associations a tool they can use to integrate Firewise concepts into design and development, as well as their covenants, conditions and restrictions and architectural rules.

According to Michele Steinberg with the Firewise program, the idea for the guide came about for two main reasons.

"We were hearing from private developers wanting to know more about how to build Firewise communities and subdivisions - how to design new communities with wildfire in mind," Steinberg said. "At the same time, some existing communities governed by associations were discovering that their master deeds or covenants were restricting the ability of residents to make important Firewise changes to their homes. In some fire-prone communities, residents are prohibited from changing a roof from flammable to nonflammable material, or from removing any vegetation, living or dead, from around their properties."

Numerous state, federal and private forestry and fire professionals, planners and researchers provided assistance in developing and reviewing the document, which draws on examples of good Firewise practices from around the country. The Community Associations Institute (CAI), a national membership organization, provided valuable information and guidance regarding community association governance.

"Building Firewise concepts into the community itself means that from day one, there are rules and expectations set on how to address fire safety issues within the community," said Andrew Fortin, CAI's vice president of government and public affairs. "Benefits to this approach include a common understanding of wildfire issues incorporated into the community structure, creation of a common framework of community behavior, and the ability to enforce safety standards."

The guide, which references National Fire Protection Association (NFPA) standards for fire protection infrastructure and fire-resistant construction and landscaping, is expected to be a useful tool for community associations throughout the U.S.

The national Firewise Communities program is an interagency program designed to encourage local solutions for wildfire safety by involving homeowners, community leaders, planners, developers, firefighters, and others in the effort to protect people and property from the risk of wildfire. The Firewise Communities program is managed by the National Fire Protection Association and sponsored by the National Wildfire Coordinating Group, a consortium of wildland fire agencies. For more information, visit www.firewise.org.



What's New at the Research Foundation?

Research Planning

Implementing the Foundation's 25th Anniversary Research Agenda

One of the outcomes from the Foundation's 25th anniversary has been the development of a research agenda designed to guide our activities over the next several years. It resulted from a combination of an extensive conversation with NFPA Technical Committee members on their perceptions of the issues facing NFPA standards in the medium term future, and challenges presented by leaders in the fire safety community and beyond resulting from external issues which will shape fire safety in the future. The agenda is comprised of seven thrust areas:

- Assessing the hazards of changing building furnishings, storage contents, and configurations
- Developing performance criteria for advanced fire detection and suppression systems
- Determining performance issues for advanced firefighting equipment and tactics to ensure that they meet the real needs of first responders
- Evaluating the effectiveness of fire and electrical safety systems as they age in place
- Developing guidance on the fire and electrical safety infrastructure needed for alternative fuels and energy sources
- Analyzing fire safety strategies for the growing aging and disabled population
- Developing fire protection strategies within the context of environmental considerations

Here are a few of the projects under development at the Foundation designed to address these areas:

Assessing the Hazards: the Foundation has submitted a proposal to the U.S. Fire Administration to explore the hazards presented to fire fighters in today's high challenge warehouses;

Fire Protection Systems Performance Criteria: the Foundation is developing a project to advance the integration of Emergency Communication concepts and protocols into building fire alarm systems;

Performance of Fire Fighting Equipment: the Foundation has submitted a proposal to the National Institute of Standards and Technology to seek fire service input on performance requirements for the emerging generation of electronic PPE;

Aging Electrical Systems: the Foundation is currently undertaking a small study for NFPA to develop a baseline of

today's residential power consumption against the current requirements in Article 220 of the NEC;

Alternative Fuels and Energy Sources: the Foundation continues to advise the Department of Energy on research needs resulting from the development of NFPA standards for hydrogen safety. We are also collaborating with NFPA on a request for DOE support for training programs for emergency responders for Plug in Electric Hybrid Vehicles.

Fire Safety for People with Disabilities: The Foundation is collaborating with the Hearing Loss Association of America and the University of Illinois on proposals designed to determine needs-based performance criteria for smoke alarms and stair assistive devices (respectively).

Fire Protection and the Environment: the Foundation has submitted a two part proposal to the National Institute of Standards and Technology to develop appropriate data collection strategies and building component test methods for fires at the wildland urban interface.

Symposia

Call for Papers issued for SupDet 2010 February 16-19 in Orlando, Florida

Participate in the Foundation's annual update on the latest in sprinkler and fire alarm research and technology. Next year's conference will include two special focuses: emergency communication and fire alarm systems; and protection of high challenge warehouses. <http://www.nfpa.org/itemDetail.asp?categoryID=1708&itemID=41170&URL=Research/Fire%20Protection%20Research%20Foundation/SUPDET%202010>

Proceedings Available from the Foundation's 2009 Symposium on Dust Explosion Hazard Recognition and Control Strategies at <http://www.nfpa.org/itemDetail.asp?categoryID=993&itemID=44141&URL=Research/Fire%20Protection%20Research%20Foundation/Proceedings>

Contact the Foundation at epeterson@nfpa.org for more information or to participate in Foundation programs. Reports available on the Foundation's website at www.nfpa.org/Foundation.

**IFMA Merchandise
Order Form**

IFMA has a line of merchandise to promote IFMA. They include a 100% cotton white golf shirt and a blue nylon windshirt with hand pockets, both come with the IFMA logo on the left breast.



Golf Shirt - \$30.00 each, includes postage and handling

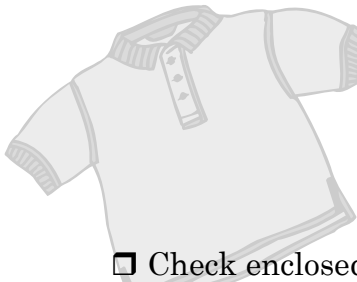
Size	Number	Cost	Total Cost
<input type="checkbox"/> Small	_____	\$30.00	_____
<input type="checkbox"/> Medium	_____	\$30.00	_____
<input type="checkbox"/> Large	_____	\$30.00	_____
<input type="checkbox"/> X-Large	_____	\$30.00	_____
<input type="checkbox"/> XX-Large	_____	\$30.00	_____

Lapel Pin - \$3.00 each, includes postage and handling

Number	Cost	Total Cost
_____	\$3.00	_____

Wind Shirt - \$40.00 each, includes postage and handling

Size	Number	Cost	Total Cost
<input type="checkbox"/> Small	_____	\$40.00	_____
<input type="checkbox"/> Medium	_____	\$40.00	_____
<input type="checkbox"/> Large	_____	\$40.00	_____
<input type="checkbox"/> X-Large	_____	\$40.00	_____
<input type="checkbox"/> XX-Large	_____	\$40.00	_____



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- Fixed or mobile walls and partitions,
- Paneling,
- Wall pads or crash pads, applied to the structure or used for decoration, acoustics, insulation, or other purposes.

An example of a material that would be required to meet the Interior finish in flame spread rating requirements of the code would be the fabric coated office cubicles.

Some of the model fire codes require that certain types of materials undergo the more rigorous Room Corner Test, such as:

- Expanded vinyl or textiles in non-sprinklered buildings or
- Non-Class A textiles in sprinklered buildings

Decorative Materials & Furnishings

For decorative materials such as curtains, drapes, hangings, or similar materials suspended from a wall or ceiling, most of the model fire codes require that the materials be flame resistant in accordance with NFPA 701 or that they be non-combustible. Most of the codes allow relatively small quantities of these decorative materials (typically less than 10 or 20%) without having to undergo flame resistant test or treatments. The requirements for flame resistant treatments of decorative materials will vary based on the type of occupancy with more restrictive requirements found for assembly, educational, and institutional occupancies.

Flame resistant treatments can be applied in paints and varnishes, by submersion or soaking, applied through a spraying technique, or as an intumescent coating that swells up when exposed to heat or flames to protect the material it is covering. Flame resistant treatments applied by way of submerging, soaking, impregnating, or spraying work best on cellulosic materials; in other words materials that were once alive (such as wood, paper, cotton, and wool).

These methods of flame retardant treatments do not work on synthetic materials, such as plastics, synthetic fabrics, and foams, as they are not capable of absorbing the flame retardant treatments. Synthetic materials, however, can be made flame resistant by adding chemicals during their manufacturing process.

Some flame retardant treatments require renewals or re-treatments at certain intervals of time or when the material has been exposed to harsh conditions such as laundering or very high or low humidity conditions.

Structural Materials

Certain wood products can undergo fire retardant treatments through a pressure impregnation process which often occurs during manufacturing. Some of the model codes allow fire retardant treated wood to be used in situations that would normally dictate noncombustible materials.

Changing Environment

Fire code officials must be aware of the changing materials that are being used as decorations, trim, and interior finish in buildings today. Even much of the trim used for baseboards and ceilings are no longer wood but are manufactured from plastic materials that have the appearance of wood. Obviously, these materials will behave quite differently in fire conditions.

Another area of concern is the use of expanded foams and carpeting on walls or ceilings. The presence of these materials should be a "red flag" to any fire inspector. Most of the model fire codes require evidence of the interior finish (i.e. flame spread rating) or a certificate of flame retardant treatments for decorative materials.

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The fire code official should also be very wary of manufacturers who purport being able to make a combustible material into a noncombustible material. At the present time we lack the technology and ability to do this. In other words there is no way to make combustible materials incapable of burning. There are, however, methods to make these materials more resistant to ignition or burning.

The fire code official should also pay particular attention to how “after-market” flame retardant treatments and coatings are applied. Remember that treatments that work by immersion or impregnation only work with materials that can soak up or absorb the treatments. Basically this limits you to materials that were once living. Synthetic materials must be made flame retardant either in their manufacturing or through the application of a coating or intumescent material.

Another red flag for the code official should be a manufacturer who claims that they can apply a chemical or treatment by spraying, brushing, or through roller application that will make normal wood products into fire retardant treated (FRT) wood. FRT wood requires treatment through pressure impregnation during the manufacturing process. This is especially dangerous when the manufacturer claims that the application of its product makes the installation of fire sprinklers unnecessary as the wood can no longer burn.

Applying the Fire Codes “In the Field”

This section is intended to provide a fire code official with some guidance on how to apply the fire code requirements to the interior finish and combustible decorations and trim. Although there is no direct correlation between combustible materials, limited combustible materials, and noncombustible materials and flame spread ratings, as a general rule, non-combustible and limited combustible materials will often meet the requirements for flame spread ratings also.

As another general rule of thumb, materials that are made of wood and are smooth, such as good quality paneling or wainscoting, will likely also meet the appropriate flame spread ratings that apply to rooms and similar areas. These types of materials may not be allowed in more critical egress areas from the building.

Wood materials that are rough, however, such as unsanded plywood or oriented strand board (OSB) likely do not meet the appropriate flame spread ratings. As a quick “in the field” application of this: If you were to run your hand across the material and there is a risk that you'll get a sliver, the material probably does not meet the appropriate flame spread ratings.

For synthetic, plastic, and foam materials, no general rules of thumb or “in the field” tests exist.

When dealing with any material where there is any doubt concerning whether or not it meets the appropriate flame spread ratings, the code official should require documentation for the material, additional testing, or have it removed or covered.

One other red flag for the fire official should be the use of pyroxylin plastics, which are also known as cellulose nitrate. Pyroxylin plastics are very hazardous because they will begin decomposition at temperatures around 300° F. They have the potential to develop almost explosive conditions with very high rates of heat release once ignited.

Pyroxylin plastics or cellulose nitrate are considered somewhat unstable; as such their use has generally declined over time. For example the use of cellulose nitrate for motion picture films was discontinued in 1951. Occasionally, however, fire inspectors will come across buildings that still contain some pyroxylin plastics or cellulose nitrate. This can be found in buildings that contain motion picture archives or some types of film, such as old x-rays in medical buildings.

NFPA Technical Committees Looking for Members

The **Committee on Aerosol Extinguishing Technology** is seeking members in all interest categories except special experts. This Committee is responsible for NFPA 2010, *Standard for Fixed Aerosol Fire Extinguishing Systems*.

The **Committee on Aerosol Products** is seeking members in the enforcing authority category only. This Committee is responsible for NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*.

The **Committee on Agricultural Dusts** is seeking members in all interest categories except special experts. This Committee is responsible for NFPA 61, *Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities*.

The **Committee on Aircraft Maintenance Operations** is seeking members in all interest categories. This Committee is responsible for NFPA 410, *Standard on Aircraft Maintenance*.

The **Committee on Ambulances** is seeking members in all interest categories except manufacturers and users.

The **Committee on Animal Housing Facilities** is seeking members in all interest categories except users. This Committee is responsible for NFPA 150, *Standard on Fire and Life Safety in Animal Housing Facilities*.

The **Committee on Boiler Combustion System Hazards—Fluidized Bed Boilers** is seeking members in all interest categories except manufacturers. This Committee is responsible for chapters in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The **Committee on Boiler Combustion System Hazards—Fundamentals** is seeking members in all interest categories except manufacturers. This Committee is responsible for chapters in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The **Committee on Boiler Combustion System Hazards—Pulverized Fuel Systems** is seeking members in all interest categories except manufacturers and users. This Committee is responsible for chapters in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The **Committee on Boiler Combustion System Hazards—Single Burner Boilers** is seeking members in all interest categories except manufacturers, special experts, and users. This Committee is responsible for chapters in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The **Committee on Boiler Combustion System Hazards—Stoker Operations** is seeking members in all interest categories except special experts and users. This Committee is responsible for stoker material in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The **Committee on Building Code—Board and Care Facilities** is seeking members in all interest categories. This Committee is responsible for Chapter 26 in NFPA 5000[®], *Building Construction and Safety Code*[®].

The **Committee on Building Code—Furnishings and Contents** is seeking members in all interest categories. This Committee is responsible for Chapter 10 in NFPA 5000[®], *Building Construction and Safety Code*[®].

The **Committee on Combustible Metals and Metal Dusts** is seeking members in all interest categories except manufacturers and users. This Committee is responsible for NFPA 484, *Standard for Combustible Metals*.

The **Committee on Confined Space Safe Work Practices** is seeking members in all interest categories, especially manufacturers.

The **Committee on Data Exchange for the Fire Service** is seeking members in the following interest categories: manufacturers, research, and insurance.

The **Committee on Electrical Equipment in Chemical Atmospheres** is seeking members in all interest categories except special experts and users. This Committee is responsible for NFPA 496, *Standard for Purged and Pressurized Enclosures for Electrical Equipment*; NFPA 497, *Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas*; and NFPA 499, *Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas*.

The **Committee on Electrical Equipment Evaluation** is seeking members in all interest categories.

The **Committee on Electrical Equipment of Industrial Machinery** is seeking members in all interest categories except users or manufacturers. This Committee is responsible for NFPA 79, *Electrical Standard for Industrial Machinery*.

The **Committee on Electrical Equipment Maintenance** is seeking members in all interest categories except users. This committee is responsible for NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance*.

The **Committee on Electrical Systems Maintenance** is seeking members in all interest categories except special experts. This Committee is responsible for NFPA 73, *Electrical Inspection Code for Existing Dwellings*.

The **Committee on Emergency Medical Services** is seeking individuals in the following interest categories: special experts, labor, insurance, and manufacturers. This Committee is responsible for NFPA 450, *Guide for Emergency Medical Services and Systems*.

The **Committee on Emergency Services Organization Risk Management** is seeking individuals in all categories except enforcers and special experts. This Committee is responsible for NFPA 1201, *Standard for Providing Emergency Services to the Public* and NFPA 1250, *Recommended Practice in Emergency Service Organization Risk Management*.

The **Committee on Explosives** is seeking members in all interest categories except manufacturers. This Committee is responsible for NFPA 495, *Explosive Materials Code* and NFPA 498, *Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives*.

The **Committee on Exposure Fire Protection** is seeking members in all interest categories except manufacturers and special experts. This Committee is responsible for NFPA 80A, *Recommended Practice for Protection of Buildings from Exterior Fire Exposures*.

The **Committee on Fire and Emergency Services Protective Clothing and Equipment—Electronic Safety Equipment** is seeking members in the following interest categories: enforcers, labor, users and consumers. This Committee is responsible for NFPA 1800, *Standard on Electronic Safety Equipment for Emergency Services* (Proposed); NFPA 1801, *Standard on Thermal Imagers for the Fire Service* (Proposed); and NFPA 1982, *Standard on Personal Alert Safety Systems (PASS)*.

The **Committee on Fire and Emergency Services Protective Clothing and Equipment—Emergency Medical Services Protective Clothing and Equipment** is seeking members in the following interest categories: enforcers, labor and users. This Committee is responsible for NFPA

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1999, *Standard on Protective Clothing for Emergency Medical Operations*.

The **Committee on Fire and Emergency Services Protective Clothing and Equipment—Hazardous Materials Protective Clothing and Equipment** is seeking members in the following interest categories: consumers, enforcers, labor, and users. This Committee is responsible for NFPA 1991, *Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies*; NFPA 1992, *Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies*; and NFPA 1994, *Standard on Protective Ensembles for First Responders to CBRN Terrorism Incidents*.

The **Committee on Fire and Emergency Services Protective Clothing and Equipment—Special Operations Protective Clothing and Equipment** is seeking members in the following interest categories: enforcers, labor, users, and consumers. This Committee is responsible for NFPA 1951, *Standard on Protective Ensemble for Technical Rescue Incidents*; NFPA 1952, *Standard on Surface Water Operations Protective Clothing and Equipment* (Proposed); NFPA 1975, *Station/Work Uniforms for Fire and Emergency Services*; and NFPA 1983, *Standard on Life Safety Rope and Equipment for Emergency Services*.

The **Committee on Fire and Emergency Service Organization and Deployment—Volunteer** is seeking members in all interest categories. This Committee is responsible for NFPA 1720, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments*.

The **Committee on Fire Department Rescue Tools** is seeking members in all categories except manufacturers and users. This Committee is responsible for NFPA 1936, *Standard on Powered Rescue Tools*.

The **Committee on Fire Hose** is seeking members from all interest categories except manufacturers and users. This Committee is responsible for NFPA 1961, *Standard on Fire Hose*; NFPA 1962, *Standard for the Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose*; NFPA 1963, *Standard for Fire Hose Connections*; NFPA 1964, *Standard for Spray Nozzles*; NFPA 1965, *Standard for Fire Hose Appliances*.

The **Committee on Fire Risk Assessment Methods** is seeking members in all interest categories except special experts. This Committee is responsible for NFPA 550, *Guide to the Fire Safety Concepts Tree* and NFPA 551, *Guide for the Evaluation of Fire Risk Assessments*.

The **Committee on Garages and Parking Structures** is seeking members in all interest categories except manufacturers, special experts, and users. This Committee is responsible for NFPA 88A, *Standard for Parking Structures*.

The **Committee on Handling and Conveying of Dusts, Vapors, and Gases** is seeking members in all interest categories except special experts. This Committee is responsible for NFPA 91, *Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids*; NFPA 654, *Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids*; and NFPA 655, *Standard for Prevention of Sulfur Fires and Explosions*.

The **Committee on Hazard and Risk of Contents and Furnishings** is seeking members in the following interest categories: enforcers, consumers, insurance, fire service, education, and manufacturers. This Committee is responsible for NFPA 555, *Guide on Methods for Evaluating Potential for Room Flashover*; proposed NFPA 556, *Guide for Identification and Development of Mitigation Strategies for Fire Hazard to Occupants of Passenger Road Vehicles*; and proposed NFPA 557, *Standard Fire Loads for Engineering Design of Structural Fire Resistance in Buildings*.

The **Committee on Helicopter Facilities** is seeking members in all interest categories except special expert. This Committee is responsible for NFPA 418, *Standard for Heliports*.

The **Committee on Hot Works Operations** is seeking members in all interest categories except special experts. This Committee is responsible for NFPA 51B, *Standard for Fire Prevention During Welding, Cutting, and Other Hot Work*.

The **Committee on Incinerators and Waste Handling Systems** is seeking members in all interest categories except manufacturers and special experts. This Committee is responsible for NFPA 82, *Standard on Incinerators and Waste and Linen Handling Systems and Equipment*.

The **Committee on Industrial and Medical Gases** is seeking members in the interest category of enforcers. This Committee is responsible for NFPA 51, *Standard for the Design and Installation of Oxygen–Fuel Gas Systems for Welding, Cutting, and Allied Processes*; NFPA 51A, *Standard for Acetylene Cylinder Charging Plants*; NFPA 55, *Standard for the Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks*; and NFPA 560, *Standard for the Storage, Handling, and Use of Ethylene Oxide for Sterilization and Fumigation*.

The **Committee on Internal Combustion Engines** is seeking members in the following interest categories: enforcers and users. This Committee is responsible for NFPA 37, *Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines*.

The **Committee on Laser Fire Protection** is seeking members in all interest categories except special expert and users. This Committee is responsible for NFPA 115, *Standard for Laser Fire Protection*.

The **Committee on Liquid Fuel Burning Equipment** is seeking members in the following interest categories: enforcers, insurance, and users. This Committee is responsible for NFPA 31, *Standard for the Installation of Oil-Burning Equipment*.

The **Committee on Loss Prevention Procedures and Practices** is seeking members in all interest categories. This Committee is responsible for NFPA 600, *Standard on Industrial Fire Brigades*; and NFPA 601, *Standard for Security Services in Fire Loss Prevention*.

The **Committee on Manufacture of Organic Coatings** is seeking members in all interest categories except special expert. This Committee is responsible for NFPA 35, *Standard for the Manufacture of Organic Coatings*.

The **Committee on Manufactured Housing** is seeking members in all interest categories except enforcers. This Committee is responsible for NFPA 501, *Standard on Manufactured Housing*; NFPA 501A, *Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities*; and NFPA 225, *Model Manufactured Home Installation Standard*.

The **Committee on Marine Fire-Fighting Vessels** is seeking members in all interest categories except manufacturers. This Committee is responsible for NFPA 1925, *Standard on Marine Fire Fighting Vessels*.

The **Committee on Marine Terminals** is seeking members in all interest categories except special interest. This Committee is responsible for

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NFPA 307, *Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves*.

The **Committee on Merchant Vessels** is seeking members from the commercial fishing industry and towing vessel industry. This Committee is responsible for NFPA 301, *Code for Safety to Life from Fire on Merchant Vessels*.

The **Committee on Mining Facilities** is seeking members in the following interest categories: special expert and manufacturing, specifically the manufacturers of mining equipment. This Committee is responsible for NFPA 120, *Standard for Fire Prevention and Control in Coal Mines*; and NFPA 122, *Standard for Fire Prevention and Control in Metal/Nonmetal Mining and Metal Mineral Processing Facilities*.

The **Committee on Oxygen Enriched Atmospheres** is seeking members in all interest categories except for special expert and research and testing. This Committee is responsible for NFPA 53, *Recommended Practice on Materials, Equipment and Systems Used in Oxygen-Enriched Atmospheres*.

The **Committee on Pre-Incident Planning** is seeking members in all interest categories. This Committee is responsible for NFPA 1620, *Recommended Practice for Pre-Incident Planning*.

The **Committee on Professional Qualifications—Emergency Vehicle Mechanic Technicians Professional Qualifications** is seeking members in all interest categories. This Committee is responsible for NFPA 1071, *Standard for Emergency Vehicle Technician Professional Qualifications*.

The **Committee on Professional Qualifications—Fire Department Safety Technician Professional Qualifications** is seeking members in all interest categories.

The **Committee on Professional Qualifications—Fire Investigator Qualifications** is seeking members in all interest categories except users and special expert. This Committee is responsible for NFPA 1033, *Standard for Professional Qualifications for Fire Investigator*.

The **Committee on Professional Qualifications—Fire Marshal Professional Qualifications** is seeking members in all interest categories except users and special expert. This Committee is responsible for NFPA 1037, *Standard for Professional Qualifications for Fire Marshal*.

The **Committee on Professional Qualifications—Fire Officer Professional Qualifications** is seeking members in all interest categories. This Committee is responsible for NFPA 1021, *Standard for Fire Officer Professional Qualifications*.

The **Committee on Professional Qualifications—Fire Service Instructor Professional Qualifications** is seeking members in all interest categories except users and special experts. This Committee is responsible for NFPA 1041, *Standard for Fire Service Instructor Professional Qualifications*.

The **Committee on Professional Qualifications—Industrial Fire Brigades Professional Qualifications** is seeking members in all interest categories except users and special expert. This Committee is responsible for NFPA 1081, *Standard for Industrial Fire Brigade Member Professional Qualifications*.

The **Committee on Professional Qualifications—Public Fire Educator Professional Qualifications** is seeking members in all interest categories except labor and users. This Committee is responsible for NFPA 1035, *Standard for Professional Qualifications for Public Fire and Life Safety Educator*.

The **Committee on Professional Qualifications—Public Safety Telecommunicator Professional Qualifications** is seeking members in all interest categories. This Committee is responsible for NFPA 1061, *Standard for Professional Qualifications for Public Safety Telecommunicator*.

The **Committee on Professional Qualifications—Rescue Technician Professional Qualifications** is seeking members in all categories except labor, special expert, and users. This Committee is responsible for NFPA 1006, *Standard for Technical Rescue Professional Qualifications*.

The **Committee on Professional Qualifications—Wildfire Suppression Professional Qualifications** is seeking members in all interest categories. This Committee is responsible for NFPA 1051, *Standard for Wildland Fire Fighter Professional Qualifications*.

The **Committee on Public Emergency Service Communication** is seeking members in the following categories: manufacturer, installer/maintainer, and special expert. This Committee is responsible for NFPA 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*.

The **Committee on Record Protection** is seeking members in the all interest categories. This Committee is responsible for NFPA 232, *Standard for the Protection of Records*.

The **Committee on Risk Management** is looking for members in all interest categories. This Committee is responsible for NFPA 1201, *Standard for Providing Emergency Services to the Public*; and NFPA 1240, *Recommended Practice in Emergency Service Organization Risk Management*.

The **Committee on Road Tunnel and Highway Fire Protection** is seeking members in the following categories: enforcers, researchers, and users. This Committee is responsible for NFPA 502, *Standard for Road Tunnels, Bridges, and Other Limited Access Highways*.

The **Committee on Safety to Life—Board and Care Facilities** is seeking members in all interest categories. This Committee is responsible for Chapters 32 and 33 in NFPA 101[®], *Life Safety Code*[®].

The **Committee on Safety to Life—Furnishings and Contents** is seeking members in all interest categories. This Committee is responsible for Chapter 10 in the NFPA 101[®], *Life Safety Code*[®].

The **Committee on Shipbuilding, Repair, and Lay-Up** is seeking members in all interest categories. This Committee is responsible for NFPA 312, *Standard for Fire Protection of Vessels During Construction, Conversion, Repair, and Lay-Up*.

The **Committee on Signaling Systems—Public Fire Reporting Systems** is seeking members in all categories except manufacturers and special experts. This Committee is responsible for chapters in NFPA 72[®], *National Fire Alarm Code*[®].

The **Committee on Solvent Extraction Plants** is seeking members in all interest categories except special expert. This Committee is responsible for NFPA 36, *Standard for Solvent Extraction Plants*.

The **Committee on Static Electricity** is seeking members in the categories of enforcers, insurance, and research/testing. This Committee is responsible for NFPA 77, *Recommended Practice on Static Electricity*.

The **Committee on Tank Leakage and Repair Safeguards** is seeking members in the interest categories of equipment manufacturers and insurance. This Committee is responsible for NFPA 326, *Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair*; and

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NFPA 329, *Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases*.

The **Committee on Telecommunications** is seeking members in the users category, specifically from the cable industry. This Committee is responsible for NFPA 76, *Standard for the Fire Protection of Telecommunications Facilities*.

The **Committee on Textile and Garment Care Processes** is seeking members in all interest categories except manufacturers and users. This Committee is responsible for NFPA 32, *Standard for Drycleaning Plants*.

The **Committee on Transportation of Flammable Liquids** is seeking members in the following interest categories: enforcers, insurance, and manufacturers. This Committee is responsible for NFPA 385, *Standard for Tank Vehicles for Flammable and Combustible Liquids*.

The **Committee on Vehicular Alternative Fuel Systems** is seeking members in the interest category of enforcers. This Committee is responsible for NFPA 52, *Vehicular Fuel Systems Code*.

The **Committee on Wastewater Treatment Plants** is seeking members in all interest categories except manufacturers and special experts. This Committee is responsible for NFPA 820, *Standard for Fire Protection in Wastewater Treatment and Collection Facilities*.

The **Committee on Water Additives for Fire Control and Vapor Mitigation** is seeking members in all interest categories except manufacturers and special expert. This Committee is responsible for NFPA 18, *Standard on Wetting Agents*; and NFPA 18A, *Standard on Water Additives for Fire Control and Vapor Mitigation*.

The **Committee on Water-Cooling Towers** is seeking members in all interest categories except manufacturers and installer/maintainer. This Committee is responsible for NFPA 214, *Standard on Water-Cooling Towers*.

The **Committee on Water Spray Fixed Systems** is seeking members in the interest category of enforcers. This Committee is responsible for NFPA 15, *Standard for Water Spray Fixed Systems for Fire Protection*.

The **Committee on Water Tanks** is seeking members in all interest categories except manufacturers. This Committee is responsible for NFPA 22, *Standard for Water Tanks for Private Fire Protection*.

The **Committee on Wood and Cellulosic Materials Processing** is seeking members in the following interest categories: enforcers and users. This Committee is responsible for NFPA 664, *Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities*.

Anyone interested in serving on one of these committees or on any NFPA technical committee can download a technical committee application from NFPA's web site at <http://www.nfpa.org/codesTC>; or by a written request to: Codes and Standards Administration, NFPA, One Batterymarch Park, Quincy, MA 02169-7471.

Jon Nisja receives International Fire Marshals Association Meritorious Service Award

The International Fire Marshals Association (IFMA) presented Jon Nisja with the International Fire Marshals Association Meritorious Service Award at the NFPA Conference & Expo in Chicago, Ill.

The IFMA Meritorious Service Award, established in 2000, recognizes a member, or members, of the International Fire Marshals Association for notable, significant service to fire safety in keeping with the highest traditions of the IFMA.

Nisja, of Shoreview, Minn., has been an active member of IFMA, NFPA, and the rest of the fire prevention community for many years. He was IFMA president in 2006 and 2007 and served on the IFMA board of directors. Nisja is also a member of the Fire Marshals Association of Minnesota and served as both president and secretary of the association. Along with assisting NFPA in updating the NFPA Fire Inspector Certification Exam, Nisja has served on numerous code and standard committees; including NFPA 1, NFPA/IFC Fire Code Drafting, Northcentral Regional Fire Code Development Committee, and other state committees.

Currently as a supervisor at the Minnesota State Fire Marshal's Office, Nisja oversees Data Management/Systems, Fire Code, Fire Protection, and the Juvenile Fire Setter Intervention/Public Education teams. Nisja, who has dedicated his life to fire protection and education, has also contributed to improving fire code training in fire departments throughout Minnesota.



IFMA President Jimmy Hill (L) presents Jon Nisja (R) with Award

NFPA Technical Committees Soliciting Proposals

The committees for the following documents are planning to begin preparation of their reports. In accordance with the Regulations Governing Committee Projects, committees are now accepting proposals for recommendations on content for the documents listed below. Proposals received by 5:00 p.m. ET on the closing date indicated will be acted on by the committee, and that action will be published in the committee's report. Proposals must be submitted to Codes and Standards Administration on proposal forms which are available in the back of all NFPA documents or from NFPA headquarters. (NOTE: For information on specific committee meeting dates, contact Codes and Standards Administration, NFPA.) Copies of new document drafts are available from Codes and Standards Administration, NFPA, One Batterymarch Park, Quincy, MA 02169-7471, or they may be downloaded from NFPA's web site at <http://www.nfpa.org/codelist>. If you need a current edition of a document, please contact NFPA, Fulfillment Center, 11 Tracy Drive, Avon, MA 02322, or call 800-344-3555.

Document No./ Edition	Title	Proposal Closing Date	Meeting Reporting
NFPA 1–2009	Fire Code	11/24/2009	A2011
NFPA 15–2007	Standard for Water Spray Fixed Systems for Fire Protection	11/24/2009	A2011
NFPA 17–2009	Standard for Dry Chemical Extinguishing Systems	5/23/2011	F2012
NFPA 17A–2009	Standard for Wet Chemical Extinguishing Systems	5/23/2011	F2012
†NFPA 30–2008	Flammable and Combustible Liquids Code	11/24/2009	A2011
†NFPA 30A–2008	Code for Motor Fuel Dispensing Facilities and Repair Garages	11/24/2009	A2011
NFPA 54–2009	National Fuel Gas Code	11/24/2009	A2011
NFPA 59–2008	Utility LP-Gas Plant Code	11/24/2009	A2011
NFPA 59A–2009	Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)	11/24/2009	A2011
NFPA 70E–2009	Standard for Electrical Safety in the Workplace®	1/5/2010	A2011
NFPA 75–2009	Standard for the Protection of Information Technology Equipment	5/28/2010	F2011
†NFPA 76–2009	Standard for the Fire Protection of Telecommunications Facilities	5/28/2010	F2011
NFPA 80A–2007	Recommended Practice for Protection of Buildings from Exterior Fire Exposures	11/24/2009	A2011
NFPA 90A–2009	Standard for the Installation of Air-Conditioning and Ventilating Systems	11/24/2009	A2011
NFPA 90B–2009	Standard for the Installation of Warm Air Heating and Air-Conditioning Systems	11/24/2009	A2011
NFPA 92–P*	Standard for Smoke Management Systems	11/24/2009	A2011
NFPA 92A–2009	Standard for Smoke-Control Systems Utilizing Barriers and Pressure Differences	11/24/2009	A2011
NFPA 92B–2009	Standard for Smoke Management Systems in Malls, Atria, and Large Spaces	11/24/2009	A2011
NFPA 232–2007	Standard for the Protection of Records	11/24/2009	A2011
NFPA 385–2007	Standard for Tank Vehicles for Flammable and Combustible Liquids	5/28/2010	F2011
NFPA 407–2007	Standard for Aircraft Fuel Servicing	11/24/2009	A2011
NFPA 414–2007	Standard for Aircraft Rescue and Fire-Fighting Vehicles	11/24/2009	A2011
NFPA 496–2008	Standard for Purged and Pressurized Enclosures for Electrical Equipment	5/23/2011	F2012
†NFPA 497–2008	Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas	5/28/2010	F2011
†NFPA 499–2008	Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas	5/28/2010	F2011
NFPA 655–2007	Standard for Prevention of Sulfur Fires and Explosions	11/24/2009	A2011
NFPA 704–2007	Standard System for the Identification of the Hazards of Materials for Emergency Response	11/24/2009	A2011
NFPA 820–2008	Standard for Fire Protection in Wastewater Treatment and Collection Facilities	11/24/2009	A2011
NFPA 1081–2007	Standard for Industrial Fire Brigade Member Professional Qualifications	11/24/2009	A2011
NFPA 1125–2007	Code for the Manufacture of Model Rocket and High Power Rocket Motors	11/24/2009	A2011
NFPA 1971–2007	Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting	12/4/2009	F2011
NFPA 1981–2007	Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services	12/4/2009	F2011
NFPA 2112–2007	Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire	11/24/2009	A2011
NFPA 2113–2007	Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire	11/24/2009	A2011

P* Indicates proposed document

† Change in proposal closing date or cycle

NFPA awards scholarships to fire safety students

The National Fire Protection Association (NFPA) Fire Safety Education Memorial Fund has made it a tradition to award students each year with scholarships to recognize their pursuit of careers in fire safety. This year four scholarship recipients have been selected based on their contributions to fire safety activities, as well as their academic achievements and leadership abilities.

Justin Perry, a junior in the Fire Protection Engineering program at the University of Maryland, was awarded the Arthur E. Cote Scholarship. Perry, who is currently working toward a combined bachelor's and master's degree, serves as one of the Clark School of Engineering ambassadors. He will be participating in fire protection analysis at Dominion Energy this summer and plans to become a professional engineer. This scholarship, which was established in 2006 in honor of Cote's retirement from NFPA, recognizes and offers support for students pursuing careers in fire protection engineering.

Yaqiang Jiang, a master's student at the University of Science and Technology of China, received the David B. Gratz Scholarship for his work in the college's State Key Laboratory of Fire Science program. Jiang has completed a research project involving smoke control in tunnel fires, and some of his results have been published in scientific journals. After receiving his master's, Jiang plans to study at the BRE Centre for Fire Safety Engineering at the University of Edinburgh for his Ph.D. The David B. Gratz Scholarship is named after NFPA's first executive director for international operations, a position Gratz held for 22 years, and recognizes the international growth of fire science and fire engineering programs.

Gregory Gorbett, the recipient of the John L. Jablonsky Scholarship, has earned bachelor's degrees in both forensic science and fire science and has received a master's degree in executive fire service leadership. He is currently earning a master's degree in Fire Protection Engineering at Worcester Polytechnic Institute and has maintained a 4.0 GPA while volunteering as a firefighter. Gorbett plans to continue his career path as a professor and fire and explosive investigator. This scholarship honors the valuable contributions of John L. Jablonsky, both on the National Commission on Fire Prevention and Control and in numerous positions with NFPA, and is designed to aid those with similar convictions to develop careers of service to mankind.

Beau Stevens, a student at Oklahoma State University's Fire Protection and Safety Engineering Technology program, was awarded the George D. Miller Scholarship. Currently a training officer intern at Stillwater Fire Department in Oklahoma, Stevens has also been a consistent recipient of the Dean's and President's Honor Roll and has been an active student leader in on-campus fire protection and safety activities. In the future, he hopes to progress through a career as a firefighter, training officer and fire marshal. The George D. Miller Scholarship, named in honor of the former NFPA president and chief executive officer, is granted to students in fire service or public administration programs.



Special Achievements Awards presented at NFPA Conference & Expo®

Every year the National Fire Protection Association's (NFPA) Standards Council recognizes individuals for outstanding service to the organization in the development of codes and standards. Awards will be presented to 12 individuals at the World Safety Conference & Expo that took place on June 10, 2009 in Chicago, Ill.

2009 Recipients for Special Achievement Award

Art Black

Carmel Fire Dept/Carmel Fire Protection Association Carmel-by-the-Sea, CA

Signaling Systems for the Protection of Life and Property Technical Committees on:

Supervising Station Fire Alarm Systems (1990 – Present, Chair since 1998)

Carbon Monoxide Detection (1996 – Present, Chair from 1996 – 2006)

Technical Correlating Committee on Signaling Systems for the Protection of Life and Property (1992 – Present)

Technical Committees on:

Cultural Resources (2001 – 2003)

Commissioning Fire Protection Systems (2007 – Present)

Robert J. James

Underwriters Laboratories, Inc.

Tampa, FL

Technical Committees on:

Fire Code Committee (1994 – Present)

Residential Occupancies (1994 – 1999)

Venting Systems for Cooking Appliances (1994 – 1999)

Pyrotechnics (2002 – 2005)

Hazardous Chemicals (2005 – Present),
(Secretary 2006 – Present)



Art Black (L) Robert James (R)

IFMA Annual Chapter Presidents Meeting Held

The Annual 2009 Chapter Presidents' Meeting was held on June 7, 2009, in Chicago, Illinois. In attendance were the Arizona Fire Marshals Association, Arkansas Fire Marshals Association, California Fire Chiefs, FPO Section Southern Division, Fire Marshals Association of Colorado, Fire Marshals Association of Delaware, Fire Marshals Association of Minnesota, Fire Marshals Association of Oklahoma, Fire Marshals Association of Utah, Fire Prevention Association of Nevada, Fire Marshals Association of West Virginia, Florida Fire Marshals and Inspectors Association, Illinois Fire Marshals Association, Iowa Fire Marshals Association, Michigan Fire Inspectors Society, New England Fire Marshals Association, New Jersey Fire Prevention and Protection Association, New York State Fire Marshals and Inspectors Association, Ohio Fire Officials Association, Oregon Fire Marshals Association, Texas Fire Marshals Association, and Wisconsin Fire Inspectors Association.

The purpose of the meeting was to make chapters aware of IFMA's goals and objectives; for chapters to participate with IFMA and to carry information back to the chapters; to assist IFMA in providing training, legislative, and technical support to the chapters; to strategize methods and programs to mutually benefit chapters and IFMA; to get chapters more involved in the codes and standards process; and to provide a forum for chapters to discuss pertinent issues with IFMA. We would like to thank all those who attended for participating and bringing ideas to the board.

Even More Important Now

By Azarang (Ozzie) Mirkhah, P.E., CBO, EFO, CFO, MIFireE

My past few articles have been focused extensively on the issues of public education and advocacy. Educating the public and our elected officials about the menace of fire has been on the top of our “to do list” going back even further than the 1947 President Truman’s Conference on Fire Prevention.

The well-known 1973 America Burning Report aimed at educating our public and our decision-makers and explained their goal as *“We have become accustomed to public indifference to the fire problem. But we hold the hope that this attitude can be changed. It is our wish that this report will provide a turning point, by reaching - if only indirectly the conscience of millions of Americans.”*

But then societal change does not come easy, and it is a long term effort. Time, and even more importantly, systematic, sustained educational effort is needed to bring about the cultural change. And of course that means resources and funding; lack of which contributed to our failure in accomplishing the goals laid out in the 1973 America Burning Report.

Fourteen years later, the 1987 America Burning Revisited report stated *“Failing to convince elected officials of the seriousness of the fire death, injury and loss statistics was considered the most serious problem because it is the path to resolving many other problems.”*

Then thirteen years later, back in 2000, the America Burning Recommissioned Report stated *“The lack of substantial funding to implement America Burning speaks volumes about the low priority that all segments of government – federal, state and local – assign the fire hazard compared to other areas of public safety.”*

Think about it. There must be some strong merits to this idea of educating the public and our elected officials, and increasing our advocacy at all levels of government. Otherwise it wouldn’t have been repeated time after time for the past few decades in all these reports prepared by the fire service leaders of the past, would it?

I guess it must be easier said than done, considering that after decades, we still have not conquered that *“public indifference”*, and the elected officials are still not *“convinced”* about the seriousness of fire problem.

And if you ask yourself why, you might come to the same conclusion as I: The problem is that other than an exceptional few, most of us don’t really believe in the solutions ourselves. Or, even if we do, we are not truly committed to it.

In the book *The Leadership Challenge*, it is stated *“There’s absolutely no way that you can convince others, over the long term, to share a dream if you’re not convinced of it yourself. You must be sincere in your own belief.”* Are you? Simply stated, most of us don’t “walk the talk”, as we should.

Obviously knowing the problem and the reasons why we have not effectively addressed it is of utmost importance. But then, that is only a part of the solution. Even more important than the why, is the how. How can we address the problem? What do we need to do? These are the key questions to be answered. To me, answering the how; is truly essential in providing us ways to address the problem.

That being said, I believe that it is quite valuable to share the wisdom and experiences of those fire service leaders who have focused on how to address the problem. Leaders who not only have the vision, but throughout their fire service career, have also displayed their strong commitment to the advocacy and educating the public and the elected officials.

Two such leaders are my friends, Robert Doke (Oklahoma State Fire Marshal), and Bob DiPoli (retired Fire Chief of

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Needham Massachusetts and the former President of the International Fire Chiefs Association). They have both contributed extensively in writing this joint article that showcases their successful advocacy and lobbying efforts in educating their States' top elected officials.

Robert Doke started the Oklahoma State Fire Marshal Ambassador program seven years ago. He believes that the prevention side of the USFA has suffered financial difficulties over the years. That being the case, his office took a "*what can we do for the USFA*" approach, in advocacy for the financial stability of the USFA, and its role at the leadership of our country's fire service.

In his own words, Robert explains:

"The Oklahoma State Fire Marshal Ambassador group has traveled to Washington D.C. every September since 2002. The first purpose of the group is to acquaint accompanying elected officials and community emergency first responders with the challenges that emergency first-responders face at home in Oklahoma. The second purpose is to acquire information of various opportunities for federal funding and other special programs.

This government-to-government link opens the door to funding opportunities for the Oklahoma fire service. This mission helps us boost the fire service in Oklahoma and that means additional grant opportunities to our local fire departments. The Oklahoma State Fire Marshal Ambassador group seeks to cultivate allies and relationships in the development of Oklahoma fire departments each September.

Oklahoma fire departments reap a number of benefits from our discussions in Washington D.C. By participating in substantive economic talks with top-ranking government officials, we are able to build the kind of relationships that are essential to effective economic development.

The meetings are of great importance to the State of Oklahoma in the form of acquisition of new technology and grants, allowing "Emergency First Responder" techniques and capabilities in Oklahoma to keep pace with the changing social atmosphere and demands on firefighters and their departments.

The group (35 to 40 Oklahomans) consists of: the Lieutenant Governor, Governor's Cabinet Secretary of Security and Public Safety, select members of the State Senate and select members of the House of Representatives, fire officials representing several organizations such as: IAFF, IAFC, NASFM, IFSTA, IFMA, Oklahoma State Fire Marshal Commission, Emergency Managers, EMS representatives, fire and EMS instructors, fire retirees and law enforcement.

The Oklahoma delegation meets with the U.S. Senators and Representatives on the Capitol Hill, Director of FEMA, U.S. Fire Administration, National Fire Academy-Superintendent, AFG Grants Director, Director of the Emergency Management Institute, terrorism experts representing the FBI, National Institute of Standards and Technology, Staff of the Office of the Joint Director of Military Support at the Pentagon, General Services Administration, specialist in the disciplines of training, public fire education, instructional systems and fire programs.

The Oklahoma State Fire Marshal Ambassador group has covered a tremendous amount of topics while meeting with numerous agencies and organizations during the past six years in requesting support for our Nation's Fire Service. Two topics that are always addressed each year since 2002 are Interoperable Communications, and the burden of federally non-funded mandates on the fire service.

Last year, two topics of request for federal support were continued financial support for the Assistance to Fire-

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fighters Grant (AFG), and continued financial support for the USFA and the National Fire Academy (NFA).

The primary goal of the Assistance to Firefighters Grants (AFG) is to meet the firefighting and emergency response needs of fire departments and nonaffiliated emergency medical services organizations.

Since 2001, AFG has helped firefighters and other first responders to obtain critically needed equipment, protective gear, emergency vehicles, training, and other resources needed to protect the public and emergency personnel from fire and related hazards. Since 2001, AFG has awarded over 40,000 grants to local fire departments with a federal share of over \$4 billion.

The Grant Programs Directorate in the Federal Emergency Management Agency administers the grants in cooperation with the U.S. Fire Administration. At the start of federal fiscal year 2005, Congress reauthorized the Assistance to Firefighters Grants for an additional 5 years through FY 2009.

From 2001 through August of 2008 Oklahoma fire departments and nonaffiliated emergency medical service organizations have received over \$58 million through nearly 850 grants. These funds have provided critically needed equipment, training and personnel to provide the protection and safety that both our citizens and our first responders deserve.

Continuous support for the USFA and NFA is of utmost importance. The USFA is America's fire and emergency services leader. The 1974 Public Law 93-498 stated "*the purpose of the Academy shall be to advance the professional development of fire service personnel and of other persons engaged in fire prevention and control activities*". The NFA is mission focused in the training of current and future emergency first responders to foster a solid foundation for local fire and emergency services' prevention, preparedness and response to fires and all-hazards. This type of training assures a smooth integration with State or Federal organizations in times of disaster."

IAFC's past president Bob DiPoli has very similar views and for the past few years has focused extensively on educating the elected official in his State.

Under Bob's leadership back in 2002, the Fire Chiefs Association of Massachusetts (FCAM) started a tradition of going to Washington D.C. during the Congressional Fire Service Institute (CFSI) events to meet with their members of Congress and US Senators.

Bob explains "originally I planned a luncheon event. It was attended by both of our US Senators and all of the 10 Congressmen. We had 68 Chiefs attended as well. It was a great success. In the evening, we attended the CFSI Dinner as a group and still remain the largest contingent of Chiefs of departments from any state attending the dinner. In 2003, we had about 100 in attendance. We changed to a breakfast in 2006 as we found there were several conflicts with roll call votes etc. at lunch time. We present a national legislative agenda to the Massachusetts delegation, and then meet with the individual members and the chiefs to discuss the State and local issues. In addition, FCAM has visited wounded members of the Military Walter Reed Hospital and laid a wreath at the Tomb of the Unknown in Arlington Cemetery as part of our visit."

With the current economic challenges that our country is battling, and with the budget cuts that the fire service is facing all across the land, today it is even more important than ever before for us all, to intensify our efforts to better educate our public about the menace of fire.

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Look at it this way; just like salesmen need to work harder to make the sales during the tough economic times, we must work harder to sell fire prevention. When the economy is good and there is plenty of money to go around, there is not as much competition for the market. Jobs and sales come around effortlessly and everyone gets their share of the pie.

But, when the economy is bad (like for example now); it is a “*dog-eat-dog world*” out there. The resources are scarce and infrequent to come about. During these times, a good salesman must make cold-calls; pound the streets and work really hard for long hours just to keep the trickling flow of income. Scarcity of resources demands that. And, at these times, the past connections made, can come in very handy; and continuous lobbying is even more important.

Bob recognizes the importance of strong advocacy and effective lobbying; especially during these challenging economic times. He knows that it is very important for us to keep up our lobbying efforts and fight for the desperately needed resources such as the Staffing for Adequate Fire and Emergency Response (SAFER) and the Assistance to Firefighters Grant (AFG).

Back in the March 15, 2009 issue of the IAFC’s On Scene, in an article titled “Effective Lobbying on a Tight Budget” Chief DiPoli stated: <http://www.iafc.org/displayindustryarticle.cfm?articlenbr=38755>

“Early in my career as fire chief, I learned that nothing comes our way without some effort. I was privileged to be elected to lead my state chiefs’ organization in the early 90s. At that time, the fire service in my home state as well as nationally was largely under-recognized and under-funded.

As leaders, we rolled up our sleeves and began to advocate for our profession at the State House. Utilizing grassroots lobbying, testimony at public hearings and visibility at fundraisers and events held for politicians, we soon began to tally our successes.

I ran for IAFC leadership during the '90s and again in 2002 on a platform that we at the national level could be even more successful and achieve our goals and objectives. As vice president of the IAFC, I led a large delegation of fire chiefs from my home state to Washington to meet with our U.S. senators and congressional representatives during the Congressional Fire Service Day that spring.

As I progressed through the chairs to IAFC president, I encouraged the other 49 states to follow our lead in Massachusetts. We saw record numbers of chiefs wearing their class-A uniforms walking the halls in Congress and we achieved unprecedented success with funding and visibility.

Sadly, many communities are feeling the pinch all across America as we suffer a recession. Fire chiefs’ travel budgets are coming under intense scrutiny and in some cases are drying up altogether. How can we maintain our relationships in Washington, while staying close to home and living within our budgets?

I offer the following suggestions:

- Be an active and informed member of the IAFC. You need to keep abreast of the news alerts and calls for action on pending legislation.
- Maintain an ongoing relationship with your U.S. senators and members of congress all year long, not just during the CFSI events or when you need something.
- Attend their fundraisers locally and invite them to your open houses and awards banquets, as well as to your fire department when you receive a FIRE Act or SAFER grant.
- Allow them photo opportunities and give them thanks in the press.
- Get to know the key staff members, particularly the liaison to public safety and your district office.
- Write to them often to weigh in on the issues affecting the fire and emergency services and your community.

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Hopefully better days are ahead for us, and when your budgets permit, make your reservations to travel to the nation's capital and join us in our efforts to keep the fire and emergency services first and foremost on the minds of our federal elected and appointed officials."

Budgeting is simply all about the distribution of the scarce resources. And, as we feel the current economic pinch, we realize that the resources are even scarcer now and they are depleting rather rapidly. It is also evident that the competition for that little piece of the pie is quite fierce.

The President's budget request for next year does not look too promising for the fire service. Although the proposed funding for the SAFER grant program indicates an increase from \$210 million to \$420 million, it also proposes reducing funding for the AFG program from \$565 million to \$170 million.

Continuation of the federal fire grant programs is of utmost importance for us in the fire service. Many of our brightest, determined, and most dedicated fire service leaders fought tirelessly for very many years to establish these federal fire grant programs. And, year after year, they stepped up to the plate and fended off the many opponents seeking elimination of those grants. As a direct result of their continued advocacy and lobbying efforts, many of the under-resourced fire departments around our country have received the desperately needed grants to protect their communities.

Last year for example, there were more than 21,000 fire departments that applied for approximately \$3.2 billion in AFG, and just over 1,300 departments applied for \$600 million through SAFER. This huge demand is indicative that although the federal fire grants are a far cry from systematic sustained funding, that fire service needs to improve our service delivery; still we definitely need this continued governmental support to be able to better protect our local communities.

My friends, times are tough and our hands are tied. Despite that, we must intensify our lobbying efforts and further increase our public education and advocacy at all levels of government. Write your congressional delegation today. Send emails to the Chair of the House Appropriations Committee (Honorable David Price - <http://price.house.gov/>), the Ranking Member of the House Appropriations Committee (Honorable Harold Rogers - <http://halrogers.house.gov/>); the Chair of the Senate Appropriations Committee (Honorable Robert C. Byrd - <http://byrd.senate.gov/>), and the Ranking Member of the Senate Appropriations Committee (Honorable George V. Voinovich - <http://voinovich.senate.gov/public/index.cfm>) and ask them to restore the AFG to its FY09 funding level of \$565 million.

We must be unified in our stance and focus all our efforts on reviving the AFG program. Believe you me; it is even more important now than ever before.



UL field labeling of UL Listed fire doors and frames aiming for next-day service

Typically, the UL Mark is applied to UL Listed fire doors and frames at a manufacturing location. On occasion, however, building owners and contractors find they need a UL Mark applied at a job site under the approval of a code official and witnessed by UL. In these cases, fire doors may have been shipped without a UL label, carry an incorrect label or the label may have been inadvertently removed in the field.

For these situations, code officials should be aware that UL offers a Field Inspection Service with two turnaround options:

Five business days — If a contractor needs a UL Mark applied within five business days, they can request Field Inspection Services by completing and submitting the automated online application form via UL's Web site at

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NFPA announces theme for Fire Prevention Week 2009

Stay Fire Smart! Don't Get Burned

Each October since 1922, the National Fire Protection Association (NFPA) has sponsored a fire prevention campaign to raise awareness about the importance of fire safety and fire safety education. Fire Prevention Week is October 4-10, 2009 and NFPA announced its theme: Stay Fire Smart! Don't Get Burned.

U.S. fire departments responded to 399,000 home fires in 2007. These home fires killed almost 2,900 - roughly eight people every day.

This year's fire prevention campaign, Stay Fire Smart! Don't Get Burned focuses on ways to prevent fires, and the deaths, injuries, and property loss they cause. Eighty-four percent of all fire deaths were attributed to a home fire. By providing valuable information on fire and burn prevention and safety tips, the campaign aims to help the public keep their homes and its occupants safe from fire and burns.

Fire Prevention Week commemorates the Great Chicago Fire of 1871. That fire, which lasted for two days, killed more than 250 people, left 100,000 people homeless, and destroyed more than 17,000 buildings.

NFPA's newly launched Fire Prevention Week Web site offers an abundance of safety tips, statistical information, and other resources that can be used by fire departments, teachers, families, and anyone else interested in learning about fire prevention or teaching others about it.

Leading causes of fires in the home include cooking, heating, and electrical. Smoking is the leading cause of home fire deaths. The leading injuries resulting from fires in the home are burns. Burns are painful and can result in serious scarring and even death. The most common types of burn are contact burns, scalds, and burns from fire or flame.

Someone was injured in a home fire every 39 minutes in 2007 and a fire department responded to a home fire every 70 seconds. By implementing simple safety measures many home fires and home fire injuries can be prevented.

CLSE Expands Fire Sprinkler Seminar Series for AHJs

Four New Fire Sprinkler Seminars Available Online at CLSE.org

Building on the success of its Fire Sprinklers 100 Series released last year, the Center For Life Safety Education (CLSE) has released three new complete segments of Fire Sprinklers 200 Series as well as the first installment of its new 300 Series, Fire Sprinklers 301, on its Web site, www.CLSE.org/.

With the addition of these four segments, CLSE continues to further its promise to aid in the contractor/Authorities Having Jurisdiction (AHJs) relationship and the long-term reliability of future fire sprinkler installations by providing low-cost, convenient online training courses. CLSE's Fire Sprinklers Series provides affordable, easy-to-access online audio seminars designed to assist inspectors and plan reviewers in gaining a more thorough understanding of fire sprinkler system installations – how they are designed, how they follow NFPA standards, and what to look for to ensure that they meet the goal of good fire protection.

Seeking to build upon the initial 100-level series, the new Fire Sprinklers 200 series, developed by Kenneth W. Wagoner, S.E.T., of Parsley Consulting, is broken down into three 90-minute programs – Fire Sprinklers 201 - *Fire Sprinklers, Reading the Plans: Understanding What You're Looking At and What To Look For*; Fire Sprinklers 202 – *Introduction to Hydraulics: Overview of Hydraulic Calculations for Fire Sprinkler Systems*, and Fire Sprinklers 203 – *Introduction to System Acceptance: Interfacing With the Inspector and Record Keeping*.

Fire Sprinklers 201's primary objective is to improve skills in reading, interpreting and evaluating building plans, site plans and fire sprinkler system plans to determine the conformance or lack thereof of for a fire protection system or systems to the codes, standards and local ordinances that are applicable in your jurisdiction. Program 202 focuses on the review and analysis of the hydraulic calculations used to support the design of automatic sprinkler systems. The final 90-minute segment of this 200 level series, Fire Sprinklers 203, is an introduction to the processes and procedures required for acceptance and placing a fire sprinkler system into service.

Further building on the concept is Fire Sprinklers 301 – *Introduction to Storage Occupancy Protection*, which discusses the basics of Storage Protection, based on the building codes, as well as the storage chapters of NFPA 13, 2007 edition. Crafted by well-known industry expert and NFPA 13, Installation Committee representative Robert "Bob" Caputo, Fire Sprinklers 301 answers the questions: What is storage?, When is it storage?, What do we mean by storage occupancies?, and How do we protect storage occupancies? Subsequent programs in the 300 series will go into greater detail about rack storage and solid-pile storage.

The development of this latest seminar series is part of CLSE's commitment to provide convenient, economical training materials to assist AHJs in better understanding fire sprinkler technology. Students download the audio presentation and accompanying slides to their computer for easy access. The Fire Sprinklers 200 series as well as Fire Sprinklers 301 are now available online at www.clse.org for \$15 without credit/\$20 with CEU/CPD credits per program.

About CLSE

The Center for Life Safety Education is a nonprofit educational organization recognized under section 501(c)(3) of the Internal Revenue Service Code. As an educational affiliate of the American Fire Sprinkler Association, CLSE provides: college scholarships for degrees in fire protection; continuing education and training for Authorities Having Jurisdiction (AHJs) and the fire service; testing and certificate programs for specialties within the fire sprinkler industry. A Board of Directors oversees policy and program development, and funding for CLSE programs comes almost entirely from contributions and training fees. Because CLSE is a nonprofit educational organization, contributions are tax deductible.

Hazardous Materials Evidence Collection Crime Scene Procedures Protect Response Force, Preserve Evidence

By CDP Public Affairs

Evidence collection processes have sometimes determined the outcome of criminal proceedings. However, the crime scenes of today are making the process more difficult with the potential recovery of chemicals, explosives, biological or radiological materials. These aspects make it even more paramount to follow procedures to ensure safety of on-scene personnel and successful prosecution of criminals.

Detectives may not always be the first on scene to survey and collect evidence. This requirement could fall into the hands of anyone responding to the crime, and understanding preservation procedures could avoid disputes in court.

A unique training course called WMD Hazardous Materials Evidence Collection, at the Center for Domestic Preparedness (CDP), introduces responders to the proper procedures, and how to protect themselves by using a nationally accepted evidence collection process.

“Crime scenes that present CBRNE hazards demand the use of specialized response skills that merge law enforcement and other disciplines to handle hazardous materials,” said Mike Aguilar, CDP training specialist. “The HEC course bridges this discipline gap. Graduates of the HEC course are better prepared to protect themselves from the CBRNE hazards and specifically trained to follow correct procedures required in the event of criminal prosecution.”

Clad in thick gloves, protective suits, masks and boots, firefighters, emergency medical services, hazardous materials, and yes, law enforcement, photograph, sketch the scene, and communicate real-time reports to the incident commander.

Set in a mock community, using realistic crime scenes consisting of prop explosives and potential chemical or biological threats, responders of all disciplines come together in this 16-hour course.

“In the past only police were concerned with evidence,” said James Chapman, HEC course manager. “Now the responders are learning that it is everyone’s concern, and that a standardized collection process will simplify the procedure.”

“The collection process we demonstrate is accepted as a universal approach to evidence collection and has withstood defense actions,” said Chuck Kissack, resident training manager. “If an evidence collection process can be directly tied to the national protocols—and demonstrated in court—debate on correct process or procedures lose credibility.”

The CDP is located in Anniston, Ala., and funds courses for state, local, and tribal response personnel, including travel, meals, and lodging. Learn more about other training opportunities at <http://cdp.dhs.gov> or call 866-213-9553.



U.S. Department of Homeland Security
500 C Street, SW
Washington, DC 20472



FEMA

June 1, 2009

A Message from the United States Fire Administrator about Residential Fire Sprinklers

The U.S. Fire Administration has promoted research, development, testing, and demonstrations of residential fire sprinkler systems for more than 30 years. The research regarding residential fire sprinkler systems has indisputably demonstrated the following:

- Residential fire sprinklers can save the lives of building occupants.
- Residential fire sprinklers can save the lives of firefighters called to respond to a home fire.
- Residential fire sprinklers can significantly offset the risk of premature building collapse posed to firefighters by lightweight construction components when they are involved in a fire.
- Residential fire sprinklers can substantially reduce property loss caused by a fire.

The time has come to use this affordable, simple and effective technology to save lives and property where it matters most – in our homes.

In the past year, the National debate about the benefits of residential fire sprinklers passed a major milestone with the adoption of a change to the International Residential Code that will require fire sprinklers in all new construction. This code change survived rigorous scrutiny, during which all interested parties had ample opportunity to comment on the technical merits of the issue. Since then, parties who oppose this life-saving technology have started a vigorous campaign to enact laws at the state level that will prohibit adoption of sprinkler requirements for new homes.

I encourage every member of the fire service to stay abreast of this rapidly changing situation, and to be ready to voice any concerns that you have about proposed legislation to your respective state legislature. The Fire Sprinkler Initiative website has been established to provide a central clearing house for up-to-date information. Log on to the site at <http://firesprinklerinitiative.org> – stay vigilant and keep the fire service community informed of developments in your area. Only by working together can we save lives.

It is the position of the U.S. Fire Administration that all Americans should be protected from death, injury, and property loss resulting from fire in their residence. All homes should be equipped with both smoke alarms and residential fire sprinklers, and all families should have and practice an emergency escape plan. The U.S. Fire Administration supports all efforts to reduce the tragic toll of fire losses in this nation, including the recently adopted changes to the International Residential Code that require residential fire sprinklers in all new residential construction.

A handwritten signature in black ink that reads "Glenn A. Gaines".

Glenn A. Gaines
Acting Assistant Administrator
U.S. Fire Administration

www.fema.gov

James Burns Awarded 2009 Excellence in Fire Prevention Award

A highlight of the 2009 PARADE (Prevention Advocacy Resources and Data Exchange) Conference held May 14-16 was the presentation of the *R. Wayne Powell Excellence in Fire Prevention Award* at the conference banquet. Wayne Powell is a former USFA and 30-year Federal employee who led the creation of PARADE. This year's award recipient is James Burns, former Administrator of the New York Office of Fire Prevention and Control.

During Burns' tenure, New York State developed a college curriculum for Fire and Life Safety, conducting more than 47,000 campus-related inspections. He was instrumental in promoting fire-safe cigarettes and, as a result, New York was the first State in the Nation, and the first organization in the world, to require all cigarettes sold in the state to meet a fire safety standard. Under his supervision, the State purchased three fire prevention trailers and "mobile" training units filled with public education tools and materials that have traveled extensively throughout the State to educate tens of thousands of children and adults in fire-safe living.

PARADE was established in 2003 to better assist America's state and major metropolitan fire marshals, and other representatives, in implementing effective fire prevention programs, conducting networking activities, and exchanging materials. For more information on PARADE and all U. S. Fire Administration programs and activities, visit the USFA Web site at www.usfa.dhs.gov



James Burns (center) was awarded the *R. Wayne Powell Excellence in Fire Prevention Award* at the 2009 PARADE Conference. Presenting the award are Wayne Powell (left) and Michigan State Fire Marshal Ron Farr



From left to right. Rich Magee, Guy Swarouth, Floyd Madison, Wayne Powell, Jim Burns, Dr. O'Neal, Paul Martin, Rob Drexler, and Bill Timmons.

Analysis Issues Associated with Children Playing with Fire

By Jennifer Flynn, NFPA Research Analyst

Much of the research on children playing with fire is rooted in the psychology behind the behavior. Psychologists and public educators discuss the discrepancies between terms and typologies of child firesetters, which affects the findings in the research. These issues carry over to the research that addresses the actual behavior—where, when, and how these fires are set. Most of this information comes from fire incident reports that are completed by firefighters and there are several different approaches to how we analyze the issue of children playing with fire. This article seeks to identify some of the issues associated with the terminology and methodology associated with the problem of children playing with fire.

Fireplay vs. Firesetting

Discussions about children playing with fire and juvenile firesetting are often made more complicated because of differences in terminology and definitions used. There is a distinction between the terms fireplay and firesetting which focuses on intent. Fireplay conveys a low level of intent to inflict harm and an absence of malice, while the term firesetting is used when the level of intent is decidedly higher¹. The nuance between the two terms blends the line between behavior that is rooted in curiosity and behavior that is delinquent.

In the U.S. Fire Administration's National Fire Incident Reporting System (NFIRS), two codes in two different fields are used to capture data on fires that result from playing with heat source and intentional firesetting.

In 2003-2006, 4% of fires that municipal fire departments responded to involved an individual playing with heat source. That's an estimated annual average of 58,600 fires. These fires resulted in an estimated 180 civilian deaths, 980 civilian injuries, and \$287.5 million in direct property damage.

An intentional fire in NFIRS Version 5.0 includes deliberate misuse of heat source or a fire of an incendiary nature and is captured under cause of ignition. This is a separate code from playing with heat source. However, an incident can be coded as both intentional and involving playing with heat source.

In 2003-2006, two of every ten fires (20% of fires) that municipal fire departments responded to were intentional. That's an estimated annual average of 316,610 intentional fires, which resulted in 440 civilian deaths, 1,400 civilian injuries, and \$1,707.5 million in direct property damage.

Comparing “playing with heat source” fires and “intentional” fires

Dr. Robert Stadolnik discusses four motivational typologies in *Drawn to the Flame: Assessment and Treatment of Juvenile Firesetting Behavior*. The four motives include: curiosity, crisis, delinquent, and pathological.

Curiosity motivated firesetting results from a desire to learn about or master fire through experimentation or play. Crisis motivated firesetting is the use of fire, either consciously or unconsciously, as a means of communicating distress, or as a cry for help. Delinquent motivated firesetting results from combinations of negative peer influence, poor decision-making abilities, wishes to impress or fit in, and tendencies to act in ways that violate social norms. The child setting delinquent motivated fires is using fire as a means of acting out against authority. Finally, pathologically motivated firesetting includes firesetters that are actively psychotic, acutely paranoid or delusional, or that have lived in chronically disturbing or bizarre environments. This is the rarest of the motivations, and evokes images of deviant arsonists or pyromaniacs.²

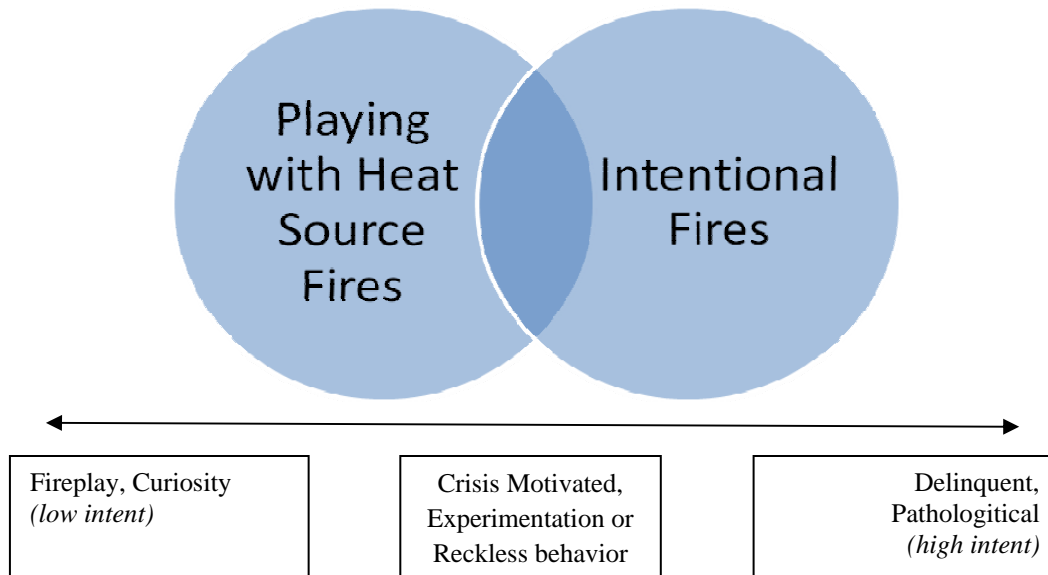
There are obvious issues in analyzing the problem of children “playing” with fire. When does fireplay turn into experimentation or reckless behavior—where the individual knows that a fire can turn uncontrolled and cause serious damage

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but does not intend that outcome? When does this behavior turn into delinquent behavior-where the individual knows there is a danger and intends for that outcome?

It is possible, though not specifically stated in the definition, that the NFIRS code “playing with heat source” is intended to capture fires that start as a result of curiosity and that have low levels of intent to inflict malice or harm. There isn’t a clear definition in NFIRS about the levels of intent, but perhaps there is an unstated spectrum that explains the relationship of the code to intent?



Unfortunately, this model is only speculative. In fact, the leading suspected motivation behind intentional fires was fire-play or curiosity, which confirms the shades of gray between definitions and coding practices.

There is no best way of isolating the overlap-the fires that are reported as both involving playing with heat source and intentional. Analysts can isolate the overlap from two different perspectives, by isolating playing with heat source fires that were also intentional or by isolating intentional fires that were also playing. Estimates differ depending on the methods used, due to scaling ratios and the allocation of unknowns.

Estimating the problem of children starting fires that turn uncontrolled

NFPA uses all fires coded as “playing with heat source” to identify the number of fires that result from children playing with fire in the report *Children Playing with Fire*. However, there are other options in handling how to analyze the issue of children playing with fire.

The following list identifies several possibilities for analyzing the issue of children starting fires. This list is not exhaustive.

1. Playing with heat source, regardless of age of firesetter
2. Playing with heat source, firesetter under 18
3. Intentional fires, firesetter under 18
4. Age was a factor in the ignition of the fire, person involved under 18

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Estimates between methodologies differ due to scaling ratios and allocations of unknowns. The following table shows the differences in estimates by methodology used. There is no best way to analyze the issue of children playing with fire, using the NFIRS database. NFPA uses the first method, playing with heat source-regardless of age of firesetter, when reporting on children playing with fire.

It is also important to note that the age of a person considered to be a “child” can differ according to law or according to different groups. Some define child as a human between the ages of birth and puberty. For the purposes of this analysis, anyone under the age of 18 is termed a “child.” The NFIRS database allows analysts to define the age range for analysis.

Estimates of Fires and Losses Related to Children Playing with Fire, Using Different Methodologies, 2003-2006 Annual Averages

Methods for Isolating Children Playing with Fire	Fires	Civilian Deaths	Civilian Injuries	Direct Property Damage (in Millions)
1. Playing with heat source, regardless of age	58,600	180	980	\$287.5
2. Playing with heat source, firesetter under 18	9,500	60	390	\$101.3
3. Intentional fires, firesetter under 18	7,500	10	200	\$50.5
4. Age was a factor in the ignition of the fire, person involved under 18	15,200	80	610	\$134.7

Method 1: Playing with heat source, regardless of age of firesetter

This is the method used by NFPA in the report, *Children Playing with Fire*. The current code for playing with heat source in NFIRS Version 5.0 is code 19 captured under Factor Contributing to Ignition. The definition and the code do not include the term child; age does not have to be a factor for reporting these fires. This was not the case prior to Version 5.0, which was instituted in 1999. In earlier versions of NFIRS, a child or children playing with a heat source was captured by ignition factor code 36 while a child or children playing with the material ignited was captured by ignition factor code 48. Ignition factors in 10-29 range identified fires that were incendiary or suspicious. Only one of these codes could be used per fire. It is suspected that even though the words “child” and “children” have been removed from the code for playing with heat source, firefighters are more likely to use this code for fires in which children are playing and are using the code for intentional fires to report fires in which adults are “playing” with or misusing fire.

For this method, fires in which factor contributing to ignition are unknown or not reported are allocated proportionally across known factors.

With this method, it is estimated that in 2003-2006, municipal fire departments responded to an estimated average of 58,600 fires, annually, that involved children playing with fire. These fires resulted in an estimated 180 civilian deaths, 980 civilian injuries, and \$287.5 million in direct property damage.

One of the benefits of continuing to use this method for analyzing the issue of children playing with fire is that the trends in these fires, with the new code phrasing, seem consistent with the trend of children playing with fire prior to

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NFIRS 5.0.

By isolating fires that involve playing in which age was a contributing factor and that age of the firesetter was under 18, we see great inconsistency in the trend line. This suggests that using this method would result in a significant under-reporting of childplay fires.

Method 2: Playing with heat source, firesetter under 18

Method 2 narrows down the focus of fires involving playing with heat source to only include those fires in which age was reported as a factor and the individual that set the fire was under the age of 18.

This method requires more steps than Method 1-finding the number of playing with heat source fires in which age was a factor contributing to ignition of the playing with heat source fire, and then finding the number of these fires that were started by a person under the age of 18. Unknowns are allocated at each step of the process.

Code 7 captured under human factor contributing to ignition is reported when age is a contributing factor in the ignition of the fire. Multiple factors can be selected in the human factor variable if such factors are reported at all. This variable is not a required component of NFIRS Version 5.0. Therefore, a fire in which age contributed to the ignition of the fire, but was not reported, is not captured in the estimates of children playing with fire, using this methodology.

With this method, it is estimated that in 2003-2006, municipal fire departments responded to an estimated average of 9,500 fires, annually, that involved children playing with fire. These fires resulted in an estimated 60 civilian deaths, 390 civilian injuries, and \$101.3 million in direct property damage.

One benefit from using this methodology is that these estimates are specifically related to fires that involve people under 18 playing with heat source. These estimates can be used for further breakdowns to identify where these fires are occurring, what equipment or heat source is being used, and what fire protection systems are in place, without worrying that data about adults playing with heat source are included.

However, by isolating fires that involve playing in which age was a contributing factor and that age of the firesetter was under 18, we see great inconsistency in the trend line for children playing with fire prior to Version 5.0. This suggests that using method 2 would result in a significant under reporting of childplay fires, which results from considerable under-use or under-coding of "age as a contributing factor" in fires where, in fact, age was a contributing factor.

Method 3: Intentional fire, firesetter under 18

The third method looks at children intentionally misusing fire. Intentional fires are captured in code 1 under cause of ignition. An intentional fire in NFIRS Version 5.0 includes deliberate misuse of heat source or a fire of an incendiary nature. Again, intentional fires in which age was a contributing factor and that age was under 18 must be isolated. Unknowns are allocated proportionally across knowns, for each step of the analysis. The same coding rules apply as they did for method 2-it is not required that human factor contributing to ignition be completed, and multiple human factors can be selected. The estimated age of the firesetter is also not required.

This approach only includes fires that were reported as intentional and therefore excludes playing fires that were not reported as intentional. According to the FBI's Uniform Crime Reports, Juveniles have accounted for roughly half of all U.S. arson arrestees. This has been true since 1992.

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With this method, it is estimated that in 2003-2006, municipal fire departments responded to an estimated average of 7,500 fires, annually, that involved children intentionally setting fire. These fires resulted in an estimated 10 civilian deaths, 200 civilian injuries, and \$50.5 million in direct property damage.

The benefits of using this approach are similar to those of using Method 3. Specific breakdowns of intentional fires started by individuals under the age of 18 can paint a clearer picture of the issue of children misusing fire. Again, there is a concern with misrepresenting the issue of children misusing fire by using this approach since age as a factor and the estimated age of the firesetter or not required to be reported, meaning it is possible that method 3 would result in a significant under reporting of children misusing fire.

Method 4: Age was a factor in the ignition of the fire, person involved under 18

Method 4 isolates all fires in which age was reported as a contributing factor to the ignition of the fire and that person involved was under the age of 18, regardless of cause. The same issue with coding requirements applies to this method. It is not required that human factor, or that the estimated age of the person involved is reported. Unknown human factors and unknown ages are allocated proportionally across known human factors and ages. This approach includes all fires in which age was reported as a factor. However, if age was a factor in the ignition of the fire, but was not reported then this approach neglects that information.

With this method, it is estimated that in 2003-2006, municipal fire departments responded to an estimated average of 15,200 fires, annually, that involved children playing with fire. These fires resulted in an estimated 80 civilian deaths, 610 civilian injuries, and \$134.7 million in direct property damage.

Method 4 relies solely on those incidents in which firefighters reported that age was a factor and that the person involved was younger than 18. A benefit of this approach is that the estimates are specifically for fires started by a person under the age of 18, regardless of if the fire was intentional or playing. The drawback to this method is that any fire in which age was a contributing factor and age was younger than 18 but was not reported are not included in these statistics, resulting in underestimation of the actual fire problem. This approach could also capture incidents in which a child's cooking started the fire, in this case there was no intentional misuse or playing with fire.

In Summary

All of the approaches to analyzing the fire statistics on children misusing fire that have been discussed have limitations. There are pro's and con's and tradeoffs associated with each. For starters, there are issues with the definition of "child." Disagreements on what age makes a person a child can lead to disagreements in estimates of the problem. There are also issues with the categorization of intent associated with the NFIRS codes-intentional or playing. Fires may be coded as playing because they do not seem intentional, possibly because the child is too young to be legally capable of forming intent. Or a fire may be coded as intentional because the behavior is a cry for help and does not have the innocence suggested by the term playing. It is also possible that in either of these situations "age is a factor" was simply not coded, which seems to be the case in many reported incidents.

Perhaps this article can start the discussion about how NFIRS can best be utilized to identify the issue of children misusing fire. Future versions of NFIRS might be strengthened by an agreement on terms, like those laid out in the spectrum of typologies in this article. Rules for coding fires in each category, with guidance for how to decide where any fire goes in those categories, would create consistency in reporting.

As the NFIRS system stands now, there is no best way of isolating the fires that are reported as both involving playing with heat source and intentional. The approaches for calculating this number results in differing estimates, due to scal-

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The Three Little Pigs & the BIG BAD Wolf

By Azarang (Ozzie) Mirkhah, P.E., CBO, EFO, CFO, MIFireE

Sixty two years ago, as a result of President Truman's directive, the President's Conference on Fire Prevention convened in Washington D.C., from May 6-8, 1947. In his keynote speech, President Truman stated "*The serious losses in life and property resulting annually from fires cause me deep concern. I am sure that such unnecessary waste can be reduced. The substantial progress made in the science of fire prevention and fire protection in this country during the past forty years convinces me that the means are available for limiting this unnecessary destruction.*"

It is important to recognize that despite the title, the 1947 conference was not specifically about fire prevention. The focus of the conference was on a comprehensive assessment of the country's fire service, and an in-depth analysis of the fire problem in America. As a result, the attendees recognized that fire prevention deserves a lot more attention and a much higher priority in addressing the fire problem in our country than ever before. They emphasized the three (3) **E**'s of fire prevention; **E**ducation, **E**nforcement, and **E**ngineering, as equally important parts of a nationwide comprehensive fire prevention program.

Percy Bugbee, National Fire Protection Association's (NFPA) legendary General Manager, was one of the main speakers at this conference. In his speech Bugbee, emphasized heavily the importance of public education and stated:

"Fires, like epidemics of disease or crime, can be stamped out successfully only through the collective will and action of society as a whole. The failure of society to prevent fires has been due to the fact that up to now the average American citizen has not appreciated that nearly all fires are due to simple, easily understood acts of carelessness or neglect. Once every man, woman, and child realizes and accepts in daily life the responsibility for simple fire prevention measures, death, injury, and destruction by fire will be substantially reduced. It is worth emphasizing that the failure of society to prevent fires is not due to any mysterious and unknown action of fire. There is hardly any field of scientific investigation where more work has been done than in the field of fire protection and fire prevention. The knowledge as to the causes of fires and how to prevent them and protect against them is available".

Percy Bugbee's professional accomplishments were outlined in a recent article titled "Looking Back", in the 2008 November/December issue of the NFPA Journal. The article mentioned that Bugbee had obtained his engineering degree from the Massachusetts Institute of Technology (MIT), and yet "*although an engineer, Bugbee came to believe that technology alone could not bring about a fire safe world*". This explains the reason for Bugbee's emphasis on the im-

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ing ratios and the allocation of unknowns. Even if we reached an agreement on terms and rules for coding, there would still be issues with reporting valid and reliable estimates of fires that involved both playing and were intentional.

Further discussion and agreement is certainly needed so that we can ultimately strengthen the body of knowledge on the topic of children starting fires and perhaps build a bridge over the gap in research based in the psychology of the firesetter and the physical behavior of the firesetter.

¹ Charles T. Putnam and John T. Kirkpatrick, *Juvenile Firesetting: A Research Overview*, The Office of Justice Programs, Juvenile Justice Bulletin, May 2005.

² Robert F. Stadolnik, *Drawn to the Flame: Assessment and Treatment of Juvenile Firesetting Behavior*, Practitioner's Resource Series 2000.

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portance of our public education efforts in his 1947 speech.

Of course, Bugbee was in agreement with President Truman, that the technology to answer the fire problem in our country has been around for decades. But then, he believed that much more emphasis should be put on the Educational aspect of our fire prevention duties. He believed that we in the fire service must better educate our public about the dangers of fire and inform them about the consequences of their decisions, and their own roles and responsibilities for their own personal safety,

Now, let's fast-forward a tad to our current times. Through decades of our persistent efforts and strong participation in the code development process, last year, we in the fire service, were finally successful in getting the residential fire sprinkler requirements into the main body of the International Residential Code (IRC).

Despite our success in achieving an overwhelming 2/3 majority of the floor votes in Minneapolis last September, our well-respected opponents, the National Association of Home Builders (NAHB), has still not acknowledged and accepted this monumental fire and life safety achievement. They are determined to fight against it every step of the way.

Now that the residential fire sprinkler requirement is in the 2009 edition of the IRC code, NAHB is mounting pressure on the states and the local jurisdictions all across the country, to not adopt the 2009 edition of the IRC code at all, or at the very least, yank the residential fire sprinkler requirements out of it.

Even more disturbing is the fact that since their failed attempt in Minneapolis last year, NAHB has been lobbying state legislatures in many of the states, not only to prevent them from adopting these building construction codes, but also to strike away the rights of the local jurisdictions to adopt any building construction codes that are more stringent than the minimum adopted state codes.

My last article titled "What's at Stake" was focused on informing our fire service peers about this dangerous trend, that if successful, would allow the special interest groups to dictate the level of community safety and fire protection based on their own meager financial interests.

Undoubtedly, this could have a devastating impact not only on our communities' fire protection and life safety, but also on the safety of our own firefighters for many decades to come.

My friends, it is rather simple. After all is said and done, just like anything else in life, it all boils down to being able to live with the consequences of our decisions. It is all about being fully aware of the real magnitude of the problem and knowing what the stakes are. We must be well-informed and be willing to accept the consequences of the decisions that we make today, which will have drastic impact on our lives for many years to come.

That being said, now, even more than ever before, we must truly recognize and appreciate the depth of Bugbee's perspectives. If the public is not well-informed about the problem itself and aware of the consequences of their own decisions, then technology alone will not be enough to address the fire problem.

Bugbee's wisdom is evident in his views that besides utilizing the available technology, we must intensify our focus on better educating our public if we truly intend to substantially reduce the devastation caused by fires in our country.

Bugbee urged us to educate our public so that they are aware of the fire problem and can recognize what is at stake. Knowing the risk factors, failure probabilities and consequences, they are able to make well-informed decisions about their own safety and that of their communities. Simply said, they must truly believe in the fact that preventing fires is

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everyone's responsibility.

I believe that Bugbee was absolutely right. Although many things have changed in the past six decades, much still remains the same. If we want to address the fire problem in our country and have safer communities, then we must educate our public about the fire problem and the consequences of their decisions. And that is the same for our public officials too.

We must educate our elected officials and public administrators. We must provide them with a true community risk assessment and fire loss management plan. This will allow them to make well-informed decisions based on the community's needs and the availability of current resources, while being fully cognizant of the long-term impacts of such decisions.

Our state legislatures and elected officials at all government levels must be aware that the strength and the integrity of the building construction codes developed at the national levels, are the backbone of our communities' life safety and fire protection. And that true consequence of reductions in the levels of life safety requirements identified in these codes, merely for the purposes of appeasing the special interest groups and relieving their mounting political pressures, would only lead to increased property losses, civilian fire fatalities and injuries, and endangered safety of our firefighters.

Are the state legislators and elected officials aware of what is truly at stake? Are they willing to accept these consequences for many decades to come? Are they willing to jeopardize the safety of our communities, merely for the financial gain of the special interest groups? Is our public fully aware of these issues? The key then is to focus our efforts on better educating our public and our elected officials.

We have known for a long time that if we educate our kids while they are still young, their minds can absorb all the information that we provide them. Then they will have a better understanding and remember the basic fundamentals of fire and life safety when they grow up. Yet, we don't spend much effort on educating them later on in life when they have greater capacity to understand and change behavior, but we should!

We must start with ourselves first. We in the fire service need to be well versed on effective fire prevention measures and come to believe that prevention is everyone's job and not a threat to suppression. A true firefighter is dedicated to protecting the community and his/her brothers and sisters from the menace of fire, and chooses the best tactics to win the fight every time. When the fire is burning, he does his job, and does it well. He also works diligently to prevent fires from endangering lives, supporting fire prevention codes and training the public, officials, and his peers in fire prevention tactics so they can join the fight against the devastating impacts of fire on our communities.

Just as I was thinking about these issues and pondering how we can better communicate with the public we serve, I received an email from a good friend of mine asking for my input on his article. This friend is a fire service leader and we share similar views on very many issues. He has an amazing talent for storytelling and has superb penmanship. In his own style he explains the most complex fire service leadership and risk management issues to people of all ages.

When I read the draft of his article titled "*The Three Little Pigs*", I was truly elated. I thought that it was a brilliant idea to revive those old childhood stories and the famous fables to be able to strike a chord and communicate with our public. After all, what better way to educate our public about the importance of solid prevention and risk management measures, the consequences and failure analysis, than to write an article about "*The Three Little Pigs & The Big Bad Wolf*"?

You all probably remember the story from the nursery rhymes quite well. But as a brief refresher, the story is about

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these three little pigs who left their mother's home to be independent and live their lives in their own way and build their own homes. Each went about constructing their homes differently based on their personal preference.

The first little pig built his house with straw. Maybe he was an environmentalist and believed in energy efficient "green" buildings. Maybe ease of construction and labor cost concerns were his reasons for his choice of building construction methods. Perhaps no one had ever pointed out the benefits of fire safe construction. No one knows, since the original author didn't explore that angle of the story.

The second little pig made his house with wood and sticks. Maybe he was aware of the better flame spread properties of wood versus the straw. Regardless though, he built his house with the construction materials of his choice.

And, finally the third little pig made his house with bricks. Rumor has it that he might have been quite conscious about his safety and security, knowledgeable about the materials and construction methods, and knew his building construction codes quite well.

Meanwhile, the big bad wolf in the neighborhood got wind of the arrival of these newcomers to his neck of the woods and decided to pay them a visit for lunch. The big bad wolf's first stop was the straw house. The first little pig saw the big bad wolf and decided not to open the door when he heard the knocks. Not being the patient type, the big bad wolf huffed and puffed, and with his first attempt blew the straw house away. There was nothing there at all to protect the first little pig. He met a very tragic ending; although the big bad wolf was quite pleased with his gains. I guess the straw house was no match for the intent and the strength of the big bad wolf's destructive will.

Sigh. Only if the first little pig was a little more safety conscious and had known the consequences of his decisions during the construction phase of his little house.

Being greedy, the big bad wolf decided to visit the second house made out of wood and sticks. And, again, since the second little pig decided not to open the door, the big bad wolf huffed and puffed, and after a few attempts was successful in having a lunch meeting with the second little pig.

I guess the second little pig had thought that the strength and durability of his lightweight construction stick house would suffice and could protect him from hazards during such emergency encounters. Not quite. Thus, he did not live with the consequences of his poor decisions, quite literally. Would he have made the same decisions if he had known? I don't think so.

Being on the success streak, the big bad wolf then decided to visit the third little pig living in the brick house. The third little pig heard the knocking on the door. He took a quick peek out of the little peep-hole and decided to decline the big bad wolf's invitation for lunch, and barricaded himself in.

The big bad wolf, not accustomed to rejection, decided to use his old proven huff and puff strategy to bring the third little pig to submission. But, the third little pig's wise decision to build his house based on the safety requirements of the latest edition of the building construction codes proved to be the smartest thing he ever did to save his life! All of the big bad wolf's huffing and puffing did not have any impact on the structural integrity of the house at all.

Not giving up so easily, the big bad wolf decided to revise his strategy and tried to sneak in the house through the chimney. That proved not to be the smartest decision that the big bad wolf had made. Not being aware of the big pot of boiling water in the fireplace below him, the big bad wolf descended down the chimney. Suffice to say that the consequence of the big bad wolf's final decision was quite tragic.

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You see my friends; it all boils down to (no pun intended) being well-informed, making the right decisions, and being able to live with the consequence of those decisions. This applies to the wolves and the pigs just the same. It is that simple.

The “*Three Little Pigs & The Big Bad Wolf*” is great to entertain the kids, but as you can see, it can also be quite an important and useful tool to educate audiences of all ages about the importance of the building construction codes.

I don’t know, but just maybe, if sixty two years ago, Percy Bugbee had expressed his perspectives about the importance of fire prevention and public education by writing a similar story titled “*The Three Little Pigs & The Big Bad Wolf*”, by now our public might have truly grasped the wisdom in his views that “*once every man, woman, and child realizes and accepts in daily life the responsibility for simple fire prevention measures, death, injury, and destruction by fire will be substantially reduced.*”

Maybe, just maybe, if our legendary Francis Brannigan, the author of the famous “*Building Construction for the Fire Service*” book, had watered it down a tad and written a simplified version of it and titled it “*The Three Little Pigs & The Big Bad Wolf*” our firefighters would have finally grasped his wisdom by now and would truly “*know their enemy*”. Maybe, just maybe, we would then not lose firefighters lives in the lightweight construction structural collapses.

One thing is for sure though. There are always wolves around in a variety of shapes, sizes, forms, appearances, organizational alliances, special interest groups, etc. We will always have opponents whose interests contradict the safety of our public, communities, and our very own safety. Today it might be the homebuilders that want to have full control of the building construction codes and oppose the residential fire sprinkler and the carbon monoxide detector requirements in the residential codes. But then who knows what will come tomorrow?

The point is we in the fire service must first fully recognize the importance of fire prevention and building construction codes ourselves. We must then educate our public and our elected officials about the risks and the consequences of their decisions in adopting these codes. And we must request that they don’t bow down to the political influences of these special interest groups in pressuring them to adopt local codes that are lower than the nationally developed building construction codes.

I truly believe in President Truman’s challenge to the 1947 Fire Prevention Conference, in which he stated that “*it is the clear responsibility of every State and local official, and every citizen, to aggressively support this national war against the growing menace of fire.*”

With the current economic challenges that our country is battling, and with the budget cuts that the fire service is facing all across the land, today it is even more important than ever before for us all to intensify our efforts to better educate our public about the menace of fire.

We in the fire service are well aware that shutting down fire stations and laying off firefighters have direct and immediate impacts on our communities’ levels of fire safety. But, we also need to recognize that eliminating the public education programs, laying off fire inspectors and reducing our code enforcement capabilities, and allowing the special interest groups to dictate adoption of less stringent building construction codes, have long term impacts and reduce our community’s safety as well.

When the elected officials are better informed about the basic concepts of community risk assessment and integrated risk management, they could then make better decisions in performing their responsibilities in mitigating hazards and pro-

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tecting their communities.

Logically then, a major part of our public education efforts must be on better informing our elected officials, so that they are well aware of the true magnitude of failure, and the direct impact and consequences of their decisions on their communities' levels of life safety and fire protection.

It is important that we realize the wisdom in the old saying that "you reap the harvest that you sow". Don't believe me? Just ask the "Three Little Pigs & The Big Bad Wolf."



NFPA announces the 2009 Fire and Life Safety Educator of the Year

Dayna Hilton, a firefighter and fire safety educator with the Johnson County RFD #1 in Clarksville, Ark., has been named the 2009 Fire and Life Safety Educator of the Year by the National Fire Protection Association (NFPA).

The Fire and Life Safety Educator of the Year Award recognizes a fire and life safety educator, who works for a local fire department, uses NFPA's materials in consistent and creative ways, demonstrates excellence and innovation in reaching out to the community, and views NFPA as the source for safety information.

Hilton volunteers about 3,000 hours each year to provide fire safety education to the public and has been using NFPA's Learn Not to Burn® curriculum and Fire Prevention Week materials for over 6 years. Hilton and "Sparkles" the Dalmatian have delivered NFPA's fire safety messages to millions of children and adults on PBS Kids Sprout, and Fox and Friends television programs.

In 2003, Hilton began the annual fire safety awareness parade in her community, which grows each year. Thirteen local fire departments and more than 20 state and local organizations also participate. Hilton has also organized a kidfest safety fair and a billboard contest.

NFPA recognizes educators are key to the success of NFPA's programs and deserve acknowledgment for playing the lead role in making their communities safer. NFPA presented Hilton with a \$1,000 honorarium and a Steuben crystal award at the NFPA Conference & Expo in Chicago, Ill. today. The Johnson County RFD #1 will also receive a \$1,000 award to enhance its fire and life safety efforts.

Majority of firefighter injuries at fire scene occur when battling home fires **NFPA calls for home fire sprinklers to reduce firefighter injuries**

About three in five firefighters injured at the scene of a structure fire (2003-2006) were battling one- and two-family home fires at the time, according to the National Fire Protection Association (NFPA) report Patterns of Firefighter Fire-ground Injuries. Of the nearly 34,450 firefighters hurt at structure fires on average annually during this period, nearly 21,000 were on the scene of a fire at a one- or two-family home.

NFPA recently launched the Fire Sprinkler Initiative: Bringing Safety Home to encourage communities to mandate home fire sprinklers in new one- and two-family homes to save lives, prevent injuries, and protect property.

“Avoiding fires altogether is by far the best scenario for everyone’s health and well-being, civilians and fire service alike,” said Lorraine Carli, NFPA’s vice president of communications. “But in the event there is a fire, home sprinklers are a proven way to save the lives of residents. Home sprinklers will also reduce deaths and injuries among the men and women of the fire service who respond to these fires.” According to NFPA, there are nearly 298,000 one- and two-family home fires each year.

There was an estimated annual average of 40,270 firefighter fireground injuries in the U.S. in 2003-2006. Of these, an average of 29,710 were minor, and 10,560 were moderate or severe. Other key findings from the report:

- The leading types of minor injuries were strain or sprain accounting for an annual average of 7,035 injuries or (24%); pain only, accounting for 3,345 injuries (12%); thermal burns only, accounting for 3,415 injuries (11%); cut or laceration, accounting for 2,695 injuries (9%).
- The leading types of moderate and severe injuries were strains or sprain accounting for an annual average of 3,635 injuries a year, or 34%; thermal burn, accounting for 940 injuries (9%); pain only, accounting for 920 injuries (9%).
- The leading causes of moderate and severe injuries were slipping, falling, or tripping (3,095 or 29%).
- The leading type of activity at time of injury for both minor and major injuries involved handling hose lines.
- The highest injury rates per 100 fires occurred in the midnight to 8:00 a.m. timeframe.

The Fire Sprinkler Initiative, a project of the National Fire Protection Association, is a nationwide effort to encourage the use of home fire sprinklers and the adoption of fire sprinkler requirements for new construction.



Residential Fire Sprinklers – A Highly Effective Tool

By Kerry M. Bell, UL

Listed residential sprinklers are being installed in an ever-increasing number of residential dwellings in North America and play an important role in protecting occupants and firefighters from the effects of fires. They provide reliable protection against fire around the clock.

Testing and certification laboratories play an important role in helping to ensure that residential fire sprinkler systems operate as intended during a fire. Essential components of residential fire sprinkler systems, such as sprinklers and piping, are required to undergo comprehensive evaluations to verify that they meet rigorous nationally recognized standards.



As an OSHA accredited Nationally Recognized Testing Laboratory, Underwriters Laboratories (UL) is a leading authority on fire sprinkler construction and performance requirements. UL has been Listing fire sprinklers since 1902, and UL engineering staff members have conducted hundreds of investigations of residential sprinklers. UL develops and publishes numerous standards on automatic fire sprinkler system components, most of which are ANSI Approved American National Standards. ANSI standards are developed using an open, consensus building process that depends heavily on input provided by a diverse range of stakeholders.

As a part of UL's third party certification program, comprehensive qualification and surveillance testing is conducted to confirm the ability of sprinklers to comply with specified performance criteria. In addition to this testing, UL closely monitors the field experience and performance of sprinklers, and regularly updates the standards to address new technology and information learned from the use of these products in the field. In recent years, a number of revisions have been introduced into UL's sprinkler standards to enhance the operating performance characteristics of both wet and dry-type sprinklers.

Residential sprinklers are investigated in accordance with the *Standard for Safety for Residential Sprinklers for Fire-Protection Service, ANSI/UL1626*.

UL 1626 is an ANSI approved American National Standard, and includes over 30 different performance tests. The performance tests fall into five categories as indicated in the following table. These tests provide a high level of confidence that fire sprinklers will perform as intended.

In addition to the performance tests conducted during the initial product investigation, UL 1626 requires the manufacturer to provide regular production controls, inspections, and tests. This program includes a Leakage Test and Glass Bulb Integrity Test (if a glass bulb heat responsive element is used). These tests are conducted on each Listed residential sprinkler produced.

UL also requires that factories producing residential fire sprinklers undergo a comprehensive audit inspection program, which complements the manufacturer's quality control programs, to verify that ongoing production of residential sprinklers continues to comply with UL requirements. UL's representatives conduct the audit inspections at manufacturing facilities located around the world.

UL's Market Surveillance program provides an additional audit of the Listed products through incident investigations and testing of samples procured from the marketplace.

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In summary, residential sprinklers undergo a rigorous evaluation to provide a high level of assurance that they will resist leakage, provide many years of service, and be ready to respond in the event of a fire. Either installed as a separate system or integrated with the domestic water system, residential fire sprinklers have demonstrated during years of use to be a very effective tool in preventing injury and death from home fires.

Category of Tests in the UL 1626 Sprinkler Standard

Category	General Nature of Tests
<i>Physical Strength and Leakage Tests</i>	<i>Strength of components, rough usage, and leakage resistance</i>
<i>Operation Tests</i>	<i>Determination of temperature rating, sensitivity to heated air conditions and sprinkler functionality</i>
<i>Corrosion and Environmental Exposure Tests</i>	<i>Vibration, temperature variation, loading, corrosion, stress corrosion, resistance to dealloying and other exposure conditions</i>
<i>Water Flow and Distribution</i>	<i>Determination of discharge coefficient and water distribution</i>
<i>Fire Tests</i>	<i>Fire tests relevant to the intended end use.</i>

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USFA Prevention Group Holds National Conference

The United States Fire Administration (USFA) was honored to once again play host to nearly 140 fire prevention professionals for the 5th National PARADE (Prevention Advocacy Resources and Data Exchange) Conference, May 14-16. Presentations, workshops, and displays addressed a wide range of fire prevention topics including residential sprinklers, global concepts for residential fire safety, marketing strategies, novelty toy-like lighters, and lessons learned.

During this year's PARADE Conference, Glenn A. Gaines, Acting Assistant USFA Fire Administrator, told the fire marshals that he was "100% committed to mitigation and prevention." Acting Assistant Administrator Gaines also shared with the group his support of the International Residential Code (IRC) requirement for fire sprinklers and that he planned to work hard to ensure that homes have working smoke alarms with long-life batteries installed.

As a result, the 2009 PARADE participants crafted and unanimously passed two resolutions: one in support of banning the sale of novelty toy-like lighters and the second one supporting the IRC for fire sprinklers in one- and two-family dwellings and townhouses. To review these two resolutions, please visit the USFA Web site at www.usfa.dhs.gov/parade/. See page 45 and 46.

PARADE was established in 2003 to better assist America's state and major metropolitan fire marshals, and other representatives, in implementing effective fire prevention programs, conducting networking activities, and exchanging materials.



PARADE

Prevention Advocacy Resources and Data Exchange

May 16, 2009

RESOLUTION IN SUPPORT OF BANNING THE SALE OF NOVELTY LIGHTERS

WHEREAS, Those members attending the 5th National Conference of the Prevention Advocacy Resources and Data Exchange (PARADE), whose mission is to identify all aspects of fire prevention critical to protection of life and property, identify best practices within Regions and provide for dissemination of those practices; and

WHEREAS, PARADE consists of members of the fire prevention community involved in enforcement of fire laws and regulations to ensure the safety of the public; and

WHEREAS, The members of PARADE are concerned about the increased sale of novelty lighters that resemble toys and other objects that children find attractive; and

WHEREAS, The PARADE members acknowledge that there have been fires and burn injuries resulting from children playing with "novelty lighters" that resemble toys and other items that children find attractive; and

WHEREAS, The United States Fire Administration established an operational objective to reduce the loss of life from fire in the age group 14 years old and younger; and

WHEREAS, The United States Consumer Product Safety Commission has a strategic goal to reduce the rate of death from fire-related causes by 20 percent from 1998 to 2013; and

WHEREAS, The United States Consumer Product Safety Commission requires certain lighters to be child resistant, but some "novelty lighters" may not be covered under these requirements; and

WHEREAS, The European Union requires all cigarette lighters to be child-resistant, but at the same time recognized that novelty lighters have an inherently higher risk of misuse by children, and thus prohibited their sale.

THEREFORE, BE IT RESOLVED THAT, The members of PARADE support individual states legislation banning the sale and use of novelty lighters and further encourages the United States Consumer Product Safety Commission to follow the European Union in banning the sale and use of novelty lighters that appeal to children to reduce the risk to fire burns, injuries, and death of our children.

This resolution was adopted by PARADE members present May 16, 2009, Emmitsburg, Maryland.

National Co-Chairs

Robert Doke/State

David Kerr/Metro

Ron Farr/ IFMA



PARADE

Prevention Advocacy Resources and Data Exchange

May 16, 2009

A RESOLUTION SUPPORTING THE
INTERNATIONAL RESIDENTIAL CODE REQUIREMENT FOR FIRE
SPRINKLERS IN ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES

WHEREAS, those members attending the 5th National Conference of the Prevention Advocacy Resources and Data Exchange (PARADE), an organization whose mission is to identify all aspects of fire prevention critical to protection of life and property, identify best practices within Regions and provide for dissemination of those practices; and

WHEREAS, PARADE consists of members of the fire prevention community involved in enforcement of fire laws and regulations to ensure the safety of the public; and

WHEREAS, PARADE members consider it unacceptable that in the 21st century, more than 3,000 people in the United States are killed in fires each year, with an overwhelming number of these deaths occurring in homes, and

WHEREAS, PARADE members desire to have a positive and consequential impact on reducing the nation's losses due to fire, and

WHEREAS, PARADE members recognize that fire sprinklers represent a proven, reliable, efficient and effective method of protecting property and life of civilians and firefighters.

NOW, THEREFORE, BE IT RESOLVED THAT, PARADE members support the adoption of the 2009 International Residential Code requirements for fire sprinkler systems in all new residential structures.

This resolution adopted May 16, 2009, Emmitsburg, Maryland.

National Co-Chairs

Robert Doke/State

David Kerr/Metro

Ron Farr/ IFMA

Kidde Recalls Dual Sensor Smoke Alarms; Can Fail to Warn of a Fire

The U.S. Consumer Product Safety Commission, in cooperation with the firm named below, announced a voluntary recall of the following consumer product. Consumers should stop using recalled products immediately unless otherwise instructed.

Name of Product: Kidde Model PI2000 Dual Sensor Smoke Alarms

Units: About 94,000

Manufacturer: Walter Kidde Portable Equipment Inc., of Mebane, N.C.

Hazard: An electrostatic discharge can damage the unit, causing it not to warn consumers of a fire.

Incidents/Injuries: The firm has received two reported incidents of smoke alarm malfunctions involving electrostatic discharge during installation. No injuries have been reported.

Description: This recall involves Kidde dual sensor smoke alarms model PI2000. The alarms can be identified by two buttons, “HUSH” and “PUSH AND HOLD TO TEST WEEKLY,” which are located on the front/center of the alarm. The model number and date code are on the back of the smoke alarm. Only date codes 2008 Aug. 01 through 2009 May 04 are included in this recall.

Sold at: Retail, department, and hardware stores and through electrical distributors nationwide from August 2008 through May 2009 for between \$30 and \$40.

Manufactured in: China

Remedy: Consumers should contact Kidde immediately to receive a free replacement smoke alarm.

Consumer Contact: For additional information, contact Kidde toll-free at (877) 524-2086 between 8 a.m. and 5 p.m. ET Monday through Friday, or visit the firm’s Web site at www.kidde.com



Money Talks

By Azarang (Ozzie) Mirkhah, P.E., CBO, EFO, CFO, MIFireE

We have all heard about what happens when “money talks”. That saying is a clear depiction of what really matters most when it comes to substance. It attests to the true power of the mighty dollar, even at this day and age when our economy is not as strong as in the years past.

That is the precise reason why, in all my articles, I focus more extensively on the national economic impact of fire. Of course, just like the rest of my peers in the fire service, saving lives and protecting our public is my most important concern and primary objective. But, let’s face it; to the bean-counters and the policy-makers of the world, the mighty dollar speaks much louder and with better clarity.

To us in the fire service, saving lives and rescuing the helpless babies from the burning building means the most. But, to the budgeting people and the decision-makers, the fact that there were 3,430 civilian fire deaths in 2007, and the home fires accounted for 2,865 (84%) of that, doesn’t have the same deep meaning as it does for us. And that my friends, is quite logical if you view them as mere statistics.

After all, when you compare our national fire fatality statistics with other statistics, it seems rather insignificant. For example back in 2007, there were an estimated 12,988 people killed in alcohol-impaired driving crashes. And, of course, there are plenty of other types of national fatality statistics that are even significantly higher than the alcohol impaired fatalities. So then, if the fatality statistics alone were to be the primary factor for establishing the societal expenditure priorities, fire service would be somewhere at the bottom of the pile, wouldn’t it? <http://www-nrd.nhtsa.dot.gov/Pubs/811016.PDF>

But then, the adverse economic impacts of fire are quite significant and can not be easily ignored. And that is the exact angle that we must focus on when dealing with the elected officials and the decision-makers at all levels of government. We in the fire service need to better understand their logic to be able to better communicate with them. To them, money talks. So let’s talk money with them.

National Fire Protection Association’s (NFPA) March 2009 report titled “The Total Cost of Fire in the United States” indicates that “*in 2006, the total cost of fire was an estimated \$317 billion or 2.8 percent of U.S. gross domestic product (GDP)*”. Now, that is no chump change, is it?

Logically, these types of economic statistics should grab the attention of the bean-counters and decision-makers, should-

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www.ul.com/fieldinspections.

Next day — If a contractor needs next-day service, they can contact UL immediately by calling 877ULHELPS (877.854.3577), Option 2 for Field Evaluation Customer Service. Depending on our commitments to other customers, our field inspection staff will strive to provide next-day service.

UL staff will contact the contractor to schedule an on-site Field Inspection to evaluate the subject doors and witness application of UL labels to UL Listed fire doors and frames in compliance with the UL Follow-Up Service Procedure.

For more information, please contact Betsy Titus at +1.847.664.2530 or Elizabeth.Titus@us.ul.com.

New report finds sprinkler ordinances don't hurt housing construction or prices
County-wide mandates for life-saving sprinklers do not result in reduced housing supplies, compared to counties without sprinkler requirements

The results of a new study conducted for the National Fire Protection Association (NFPA) concluded that the presence of sprinkler ordinances has no negative impact on the number of homes being built.

Conducted by Newport Partners, Comparative Analysis of Housing Cost and Supply Impacts of Sprinkler Ordinances at the Community Level compared residential construction in four counties; Montgomery County, Maryland, was paired with Fairfax County, Virginia, and Prince George's County was paired with Anne Arundel County, both located in Maryland. Montgomery County and Prince George's County have sprinkler requirements; Fairfax County and Anne Arundel County do not. The selected areas, all developmentally mature, cover a wide geographic area and contain a variety of housing stock and income levels, making them prime for comparing municipalities with and without sprinkler ordinances in place.

"This study clearly demonstrates that home fire sprinkler requirements do not impede housing development starts," says Jim Shannon, NFPA president. "This report is another point to make the case for enacting life-saving sprinkler requirements in local communities. "

Sprinkler ordinances were enacted in Montgomery and Prince George's Counties in several stages, beginning in the late 1980s, but never in Fairfax County. Anne Arundel County adopted a requirement for single-family detached residences this year; this study looked at Anne Arundel County housing starts prior to the ordinance. No reduction in the number of single-family homes built in either Montgomery County or Prince George's County accompanied the enactment of ordinances, compared to the other two counties in the study that do not have sprinkler ordinances. Rather, both Montgomery and Prince George' counties saw larger relative increases in construction in the year after the ordinances went into effect, compared to the other two counties.

Data for the analysis included annual single-family building permits, surveys of housing and households, local documents and news reports released before and after adoption of residential sprinkler requirements, as well as reviews of other housing regulations. Interviews with key builders, trade association staff and local government officials were also conducted.

In interviews, builders and staff of the Maryland-National Capital Building Industry Association (MNCBIA) all indicated that the sprinkler requirements did not significantly affect the volume, character or price of the construction of new homes. According to the report, "None of the statistical or interview information demonstrated that the requirements led to reduced housing supply."

All model safety codes now require the use of fire sprinklers in new one- and two-family homes. These requirements offer the highest level of safety to protect people and property. To review the complete finding from this report, please visit the Fire Sprinkler Initiative's Web site.

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n't it? There are those who will say no. They say that they believe as a result of decisions made by irresponsible, unaccountable, self-centered policy-makers, we are facing the recent economic failures that have broken all the paradigms and has dragged us into a new low; where even the term "billion" has lost its true significance and value. They would say that nothing is going to wake up those decision-makers and make them smell the coffee. After all, if they had the foresight, and were not so focused on their own immediate gains, we would not be in the pickle that we are in now.

But, I think otherwise. I am an optimist at heart. I believe that if anything at all is going to grab the decision-makers' attention, make them see the light and recognize the true magnitude of the fire problem in our country, it is the good old mighty dollar.

The mighty dollar plays a role on both sides of the loss/gain equation. For the decision-makers, the evaluations are merely based on the cost/benefit analysis. Logically, if the benefits and savings far outweigh the costs, then the expenditures are well justified. A good rate of return on the investment, or as they say " *the biggest bang for the buck*", would make our case much more attractive for the decision-makers at both the local and national levels of government. We must have a net positive value, which means that we must save more for our public than we cost them.

Logically, the concept should work at all levels of government, local and national. The focus of this article though, is on the national level and the impact that the national decisions could have at the local levels.

As I have discussed in all my previous articles, I believe that the federal government, through their various federal grants, could be a great impetus for change and could have a significant impact in decreasing the economic devastations caused by fire. In doing so, it will save lives too, both civilians and firefighters. The key for long term success is making sure that the mighty dollar is best utilized to bring about tangible positive results. We must take measures that have a direct positive impact in reducing the fire fatalities and decreasing the economic burdens of fire in our country.

This of course, is by no means a new concept and I am not the first one to talk about it either. Much smarter fire service leaders, back in the 1987 America Burning Revisited report, discussed the very same concept and stated "*Government and other institutions can encourage fire safety by offering financial incentives (i.e. tax rebates or reductions) to those who do not have fires, practice fire safety behavior or install automatic fire protection systems.*"
<http://www.usfa.dhs.gov/downloads/pdf/publications/5-0133-508.pdf>

And no, they didn't just come to this conclusion out of the clear blue sky either. They saw that there were other successful examples of where the federal government, through their federal grant programs, was able to be the impetus of change at the local levels.

Using the federal grants to hold the local governments accountable for implementing improvements is what the federal government has done quite well through many of their national agencies such as the Environmental Protection Agency (EPA), the Federal Highway Administration (FHA), and the Occupational Safety and Health Administration (OSHA), just to name a few.

Let's take a look at the Environmental Protection Agency (EPA) for example. Based on the information provided on their website, EPA is responsible for researching and setting national standards for a variety of environmental programs, and delegates to the states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. Where national standards are not met, EPA can issue sanctions and take other steps to assist the states and tribes in reaching the desired levels of environmental quality. <http://www.epa.gov/epahome/whatwedo.htm>

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EPA delegates the responsibility to the states and then through their federal grants and sanctions program they seek compliance with the national standards. I ask myself if it works well for them, then why not for us? Why can't we learn from others and use their successful models to assist us in addressing the fire problem in our country?

I believe that to address the fire problem in our country, similar to the EPA, we should be "*setting the national standards*", and then through enforcement reach the "*desired levels*" of safety. Why shouldn't we utilize the federal grants program to require the states and local jurisdictions to comply with the minimum fire and life safety provisions outlined in the most recent edition of the codes and standards developed by the International Code Council (ICC) and the National Fire Protection Association (NFPA)?

As for "*setting the national standards*", I believe that in the absence of a true set of national building construction codes in our country, it is indeed every states' right and very appropriate for the states to adopt and establish their own building construction code based on the ICC and NFPA codes and standards. But, then these state codes must only be the minimum and not the maximum. Each of the local jurisdictions then has the right to exceed those minimum state codes, but is prohibited to be less restrictive.

Similarly, we could use the federal grant and sanctions program to seek compliance with the national standards. How about requiring that states applying for federal grants must adopt the most recent editions of the building, fire, and construction codes as the base minimum and they should not be less stringent than the minimum requirements of the nationally developed codes?

Why do I suggest this now? Because the national building construction codes establish the minimum levels of protection, thus reducing them even further down could not benefit our communities. It would only help the special interest groups with their financial interests, but would decrease fire protection for our public. And to me, as a fire service member protecting our people and our communities from the wrath of fire is my prime objective.

These special interest groups are on the offensive at the state levels to prevent the states from adopting the 2009 edition of the national building construction codes. Or, as a minimum, their goal is to cherry pick and throw away the fire protection and life safety measures such as the carbon monoxide detectors and the residential fire sprinkler requirements in these codes.

Let me be as clear as I can be. Right now as you read this article, there is a strong lobbying effort by the National Association of Home Builders (NAHB) at the various states legislatures asking them to bypass adoption of the 2009 edition of the ICC codes, or at the very least remove the requirement for residential fire sprinklers out of the codes. The policy-makers are influenced by the money NAHB spends on lobbying all across the country. If they don't see and recognize that there is an adverse economic impact to their decisions, then they will side with the NAHB every single time. How would that impact fire protection and life safety in our communities? Surely, the results would not be positive for the citizens we protect.

As I had stated in my previous article titled "What's at Stake", for the past few months the National Association of Home Builders (NAHB) has made systematic, behind-the-scenes maneuvering at the states level with the intent to erode the rights of the jurisdictions to adopt and enhance building construction codes at the local levels. This indeed is an outrageous overreach and sets a terrible precedent endangering the lives of the public and firefighters alike. [http://cms.firehouse.com/web/online/In-the-Community/Whats-at-Stake/9\\$63514](http://cms.firehouse.com/web/online/In-the-Community/Whats-at-Stake/9$63514)

These special interest groups want the state legislators to grant them the right to adopt their own substandard building construction codes as they deem appropriate in serving their needs. And, to make matters even worse, they want the state

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legislatures to disallow the local jurisdictions from adopting a more stringent building construction code.

Money talks! And, the home builders are making a lot of political contributions across the country, and their voices are being heard at the state levels. At the state legislative level, the decision-makers are not at all familiar with the construction codes. Yet, one thing that those people, who know nothing about building and fire codes, all understand; is money. They are also well accustomed to review issues based on the cost-benefit analysis. And, if the possible gains are much smaller than the probable losses, they will not risk such investment. Logically (although politics and logic do not perfectly match) then, they would not risk losing federal grants for their jurisdiction for the sake of mere political contributions and personal gains. Money talks!

The state legislatures must realize that there could be an adverse financial impact on their jurisdiction as a direct result of their attempt to appease the NAHB in lowering the safety of our communities. And, guess what? If the magnitude of that adverse financial impact for non-compliance is significant enough, then they will think twice before granting NAHB's wish. After all, the state legislators and politicians are very pragmatic when it comes to money.

This way the states and local jurisdictions can have their Constitutional right to adopt any/all codes that they want. But, then they should not qualify to receive federal grants if they lower the national standards. After all, why should the taxpayers give them money to build substandard structures?

The point is that fire and life safety for the occupants and the firefighters alike must be respected and provided for as required by the national standards. Let the states and locals decide then. States and local jurisdictions can adopt anything they want. That is their right. But, if it is anything less than the nationally developed building and construction codes, then they won't receive the federal grants. How about that?

Am I asking for something that is unprecedented and too unreasonable? Is this approach too radical and way out in left field? Before you nod your head and answer yes, let me tell you that the very same organization that our beloved United States Fire Administration (USFA) resides in, the Federal Emergency Management Agency (FEMA) utilizes this very same approach with their floods program.

Take a look at FEMA's National Flood Insurance Program (NFIP) and then ask yourself why wouldn't the same concept work for fire? <http://www.fema.gov/about/programs/nfip/index.shtm>

If FEMA can do it for floods, then why couldn't USFA (which is also part of FEMA) do the same for fire? On FEMA's website it states:

"The Mitigation Directorate, a component of the Federal Emergency Management Agency (FEMA), manages National Flood Insurance Program (NFIP)...Nearly 20,000 communities across the United States and its territories participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes Federally backed flood insurance available to homeowners, renters, and business owners in these communities. Community participation in the NFIP is voluntary.... Flood insurance is designed to provide an alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. Flood damage is reduced by nearly \$1 billion a year through communities implementing sound floodplain management requirements and property owners purchasing of flood insurance. Additionally, buildings constructed in compliance with NFIP building standards suffer approximately 80 percent less damage annually than those not built in compliance."

Why can't we do the same? Our economic losses are much greater than the floods and we lose more lives in fires. So

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why can't FEMA who already has the means and the organizational structure to implement such policies do the same for us on the fire side of the house?

Just take a look at the following 2007 fire loss statistics from the NFPA and then decide for yourself if these statistics warrant similar federal incentive programs to address the fire problem.

"In 2007, U.S. fire departments responded to 399,000 home structure fires. These fires caused 13,600 civilian injuries, 2,865 civilian deaths, \$7.4 billion in direct damage...In 2007, home structure fires caused 84% of the civilian fire deaths and 77% of the civilian fire injuries. Homes include one-and two-family dwellings, apartments, townhouses, row houses, and manufactured homes...Sprinklers decrease the fire death rate per 1,000 reported residential fires by 77% and the average loss per residential fire by 63%."

If FEMA's flood program works well, then we should use that same concept to help address the fire problem in our country too. Look at it this way, although the "*community participation in the NFIP is voluntary*", jurisdictions who want to receive the benefits would have to adopt and enforce the nationally adopted codes. Call it incentive or disincentive, it works, and the local communities "*voluntarily*" participate by adopting and enforcing those codes.

Why can't we do that? Now, imagine if we had that in place. Do you think that the state legislatures would opt for losing their federal grants just to appease the special interest groups opposing the residential fire sprinklers? I believe that having a similar federal grant (incentive/disincentive) program could be a valuable tool to persuade the states to not fall for the NAHB's manipulations.

Einstein had said that "*No problem can be solved from the same level of consciousness that created it*". We need to elevate and enhance our level of consciousness by "*thinking outside the box*" and learning from the successful examples of others. We need to establish similar types of performance measurements and qualification guidelines that would encourage the states to adopt and enforce the most recent editions of the nationally developed building construction codes to qualify for receiving federal grants. Without it, the special interest groups will keep on eroding the construction codes to suit their own financial needs and that would only result in prolongation of the fire problem in our country.

To succeed in the long run, we need to work from all directions, top to bottom, and even more importantly the grassroots efforts all the way from the bottom to the top. As I have mentioned in all of my previous articles, I strongly believe in public education. In educating our public, organizations such as the Common Voices (the recent recipient of the Senator Paul S. Serbanes Fire Service Safety Leadership Award at the CFSI) could play a very significant role. <http://www.fireadvocates.org/>

Common Voices could follow the successful example of yet another nationally well-known grassroots life safety organization, the Mothers Against Drunk Driving (MADD). After decades of hard work, MADD was successful in their efforts and all states eventually adopted the National Minimum Drinking Age act of 1984 or they would be subjected to a 10% decrease in their annual federal highway apportionment. <http://www.law.cornell.edu/uscode/23/158.html>

My friends, my intent for bringing up the NFIP example wasn't the establishment of a national fire insurance program. That example was only mentioned along with the MADD example just to show that there are also other ways that we, in the fire service, need to explore if we are serious about addressing the fire problem in our country. I am sure there are plenty more examples once we put our minds to it and do more research.

Education is the key, and that starts first with our own in the fire service. Once again Einstein's views are quite applicable where he said "*Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop question-*

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ing.” And, questioning is what we need to do. It should be the very first step in our quest to finding the solutions.

To have a better chance of success and a brighter future, I believe that we, in the fire service, need to learn from our past history. We must evaluate and critique our own performance in implementing the well-known 1973 America Burning report. We must do research and learn more from other similar national successful programs. And, from all these, develop a solid national strategy in promoting fire and life safety solutions to our country’s fire problem.

Yes, money talks. And, the politicians and decision-makers are quite attuned to hear it loud and clear. One does not have to be as smart as Einstein to recognize that in talking with these folks, you must cut to the chase and get straight to the bottom line, being money. That is the exact reason why we in the fire service need to focus more on the economics of fire while communicating with them. Statistical cost-benefit analysis is the backbone and the sole factor in their decision-making process.

We, in the fire service, are well aware of the power of the mighty dollar. Yet we can also hear our conscious constantly reminding us that saving lives and protecting our communities are our prime directives. It is time to be bilingual.

FEMA Administrator Fugate Applauds the Senate's Confirmation of Kelvin Cochran as the Administrator of the U.S. Fire Administration

Federal Emergency Management Agency (FEMA) Administrator Craig Fugate applauded the Senate's confirmation of Kelvin Cochran as the Administrator of the U.S. Fire Administration.

"As the Chief of the Atlanta Fire Rescue Department as well as the former chief in Shreveport, LA, Chief Cochran brings extensive experience to a critical position within our Agency and the Department of Homeland Security," said Administrator Fugate. "The USFA plays a critical role in our efforts to mitigate, prepare, and respond to disasters and emergencies, and I look forward to working with Chief Cochran as we continue to build our national emergency response team."

Cochran has twenty-eight years of experience in the fire service including firefighting, emergency medical services, hazardous materials, public education, research and development, personnel management, and administration, with a specialization in training and strategic planning.

Most recently, Cochran served as Fire Chief for the City of Atlanta Fire Rescue Department, where he coordinated homeland security and emergency preparedness initiatives between the City of Atlanta and the Atlanta Fulton County Emergency Management Agency (AFCEMA) and oversaw 35 fire stations providing fire, rescue and emergency medical services.

Previously, he served in the Shreveport, La. fire department as a Firefighter, Assistant Chief Training Officer, and Fire Chief. Cochran also served as President of the Metropolitan Fire Chiefs Association, the 1st Vice President of the International Association of Fire Chiefs (IAFC), and Vice Chairman of Volunteers of America (VOA).



THE FIRE PROTECTION RESEARCH FOUNDATION

Call for Papers

Suppression, Detection and Signaling Research and Applications – A Technical Working Conference (SUPDET 2010)

February 16-19, 2010
Orlando, FL

The ***Fire Suppression, Detection and Signaling Research and Applications Technical Working Conference, SUPDET 2010***, is scheduled for February 16-19, 2010 in Orlando, Florida, and will address the latest developments in research, technology, and applications for the fire protection community.

In addition to the conference's expansion last year to include **emergency communications**, this conference will include a special focus on **fire protection for high challenge warehouses**. Papers are sought on new developments in fire suppression, detection and signaling with a focus on the following:

- Performance of New Technologies and Systems
- Codes, standards and regulatory developments
- Recent research (simulation and testing)
- New approaches for high challenge warehouse applications (detection and suppression)
- Human behavior and occupant notification

Interested presenters are asked to submit a one page abstract by e-mail no later than **October 2, 2009** to **epeterson@nfpa.org**. Submitted abstracts must include the full title, and name(s), affiliation(s), address(es), telephone number(s), and e-mail address(es) of the author(s), with the presenter identified (underlined). Format your abstract for 8 ½" x 11" paper, single-spaced, 12-point Times New Roman (or equivalent) text with 1" text margins, using Microsoft Word 2000 or later.

Note that abstracts with a commercial focus will not be accepted.

Abstracts will be reviewed by an international program committee. If selected, presenters will be asked to submit an extended abstract, at most 3 pages, for publication in the meeting program or, at the author's option, a full paper no later than **January 8, 2010**. A special edition of NFPA's peer reviewed journal *Fire Technology* will publish selected papers from the symposium.

Program Committee for SUPDET 2010

Kenneth W. Dungan, Risk Technologies, LLC
Bogdan Dugoglorski, University of Newcastle
Robert Schifiliti, RP Schifiliti and Associates

Joseph Senecal, Kidde Fenwal, Inc.
Kenneth Isman, National Fire Sprinkler Association
Daniel O'Connor, Schirmer Engineering Corporation

UL is sponsoring an important public safety symposium for anyone who is interested in learning more about the concepts of building fire safety functions into residential buildings in North America

The Residential Fire Safety Symposium is scheduled for December 2 and 3, 2009 and will take place the Arizona Grand Resort in Phoenix, Arizona.

The goal of the event is to bring parties involved overall residential built environment to discuss fire designs, fire concepts, fire protection methods, use and installation of sprinklers, etc. Please click on the following link to for more details and registration page. The cost of the symposium is \$99 for the two days, and we have reduced rates for the Arizona Grand Resort.

<http://www.uluniversity.us/catalog/display.resource.aspx?resourceid=228281>

We hope that you will attend this event, and join us where people interested in all aspects of fire safety and home building can come together for a positive, fruitful discussion on an issue that is receiving national attention in the United States and Canada.

For additional information or questions, please contact: Steve Kerber at shephen.kerber@us.ul.com or 847-664-3329 or Bob James at robert.j.james@us.ul.com or 813-956-8669



Coming Events

August

- 4-6 NFPA Standards Council, NFPA Headquarters, Quincy, MA
11-12 Northcentral Regional Fire Code Development Committee, Traverse City, MI
18-19 Western Regional Fire Code Development Committee, Bozeman, MT
 18-21 Electrical Equipment of Industrial Machinery, Denver, CO
 31-Sept 1 Pyrotechnics, San Diego, CA

September

- 2 Northeastern Regional Fire Code Development Committee, Manchester, NH**
 21-25 Safety to Life and Building Code Meetings, Cleveland, OH
 21 Building Systems
 21-22 Fundamentals
 22 Furnishings and Contents
 22 Structures, Construction and Materials
 23 Building Construction
 23-25 Means of Egress
 24-25 Fire Protection Features
 24 Building Service and Fire Protection Equipment
 22-24 Forest and Rural Fire Protection, Charleston, SC
22-25 Michigan Fire Inspectors Society Annual Conference, Lansing, MI
 24-25 Handling and Conveying of Dusts, Vapors, and Gases, Baltimore, MD
28 IFMA Board Meeting, Jackson, WY

October

- 1-2 Professional Qualifications—Emergency Vehicle Mechanic Technicians Professional Qualifications, San Antonio, TX
 6-7 Cultural Resources, Denver, CO
19-23 Iowa Fire Marshals Association Annual Meeting, Ankeny, IA
19-23 Texas Fire Marshals Conference, Austin, TX
20-23 New York State Fire Marshals and Inspectors Conference, Montour Falls, NY
 26-28 Lightning Protection, Richmond, VA
 27-28 NFPA Standards Council, San Francisco, CA

November

- 2-5 Florida Fire Marshals and Inspectors Association Annual Conference, Orlando, FL**
3-6 Tennessee Fire Safety Inspectors Conference, Murfreesboro, TN
3-6 Wisconsin Fire Inspectors Association Conference, Wausau, WI
18 New Jersey Fire Prevention and Protection Association Conference, Atlantic City, NJ

December

- 2 Arizona Fire Marshals Association Conference, Mesa, AZ**
 2-12 National Electrical Code Panels, Redondo Beach, FL
 7-11 Safety to Life and Building Code Meetings, Cleveland, OH
 7 Detention and Correctional Occupancies
 8 Educational and Day Care Occupancies
 8 Board and Care Facilities
 8 Mercantile and Business Occupancies
 9 Assembly Occupancies and Membrane Structures
 9 Residential Occupancies
 9-10 Industrial, Storage, and Miscellaneous Occupancies
 10-11 Health Care Occupancies