

# FIRE MARSHALS QUARTERLY



INTERNATIONAL FIRE MARSHALS ASSOCIATION • Winter 2001

## True Heroes

They see the terrorized faces  
And feel the heat first hand  
The horror now surrounds them  
In the destruction of our land  
Their work is never ceasing  
They search into the night  
But they don't give up the fight  
The fight to bring some closure  
To the loved ones left behind  
To help begin their healing  
And bring comfort to their minds  
The comfort that is needed  
In the awful time of grief  
Still trying to understand  
As we watch in disbelief  
These firemen and search crews  
To whom many owe their lives  
Are the brave souls still searching  
For who may have survived  
Risking their own lives at every moment  
In what they call "Ground Zero"  
These men, women, husbands and wives  
Each a true American hero  
True heroes that deserve our thoughts  
Our caring prayers and love  
Their courage and unselfishness  
Reach to the heavens above  
And above we look into the clouds  
Where smoke still fills the sky  
Yet we are reminded of our greatness  
To see the stars and stripes fly high

Please send Kelley an e-mail or card  
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## Our Brotherhood of Heroes

As we go through our lives so complacent,  
Taking safety and freedom in stride,  
We forget there are those with their lives on the line,  
Facing danger and death—side by side.  
Regardless the size or shape of the Beast,  
These Titans gear up and proceed.  
Calmly dealing with horrors we cannot imagine,  
Determined, they answer the need.  
There is no way to measure the depth of their daring  
As a world-class performance they give.  
If they fall or are maimed in the course of their day,  
They do so that the rest of us live.  
We must also remember their families,  
Who support them and manage the home.  
For they know any day, fate could spirit away  
Their loved one and leave them alone.  
God be with all you, uniformed champions,  
As you each give the effort of ten.  
For your valor and courage, strength of spirit and heart,  
**THANKS** and **BLESS YOU**—again and again.

Although the above is true of all Fire, Police, Military,  
Emergency men and women, this humble verse is  
dedicated to the superb Sentinels of New York City.

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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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## Is Evacuation Always Necessary? *School Inspection Section*

*By Jon Nisja, Supervisor, Minnesota State Fire Marshals Office*

For many of us the only real fire safety training we received was going through the regular fire drills during our days in school. The fire alarm would sound and all of the students would move quietly, in single file, almost like robots, to our designated location outside. After a few minutes, the school bell would sound and we were all allowed to go back to our classrooms.

It was all pretty simple and, for the most part, it worked. There were even a few times when the fire alarm seemed to occur at some very convenient times: nice, sunny, spring afternoons or the day of the dreaded English exam. A few of us even experienced fire alarms at some very inconvenient times: in January in swimming class.

Many of the requirements for fire evacuation drills and the procedures that were developed were based on some disastrous fires that had significant life loss. For schools the fire at Our Lady of the Angels School in Chicago in 1958 was the catalyst for a major study of school fires in the late 1950s and early 1960s. One of the factors that contributed to the 95 deaths in that fire was a delay in activating the alarm. The only fire protection in that school building were manual fire alarm pull stations mounted about six feet high to prevent students tampering with them. The subsequent studies that were done looked at how effective smoke detection and sprinklers would be in schools.

This particular fire started in some combustibles being improperly stored under an open stairway. Officially, the cause is listed as undetermined but some more recent evidence has shown that the fire may have been arson.<sup>1</sup> The studies and research done in subsequent years showed that smoke detection and sprinklers could be effective in schools. Unfortunately, the technology of the day (1958–1960) was fairly archaic by today's standards. Because of the cost and limited availability of the technology, particularly with smoke detection, few schools were provided with these types of fire protection.

All of this started to change in the 1980s and 1990s. Smoke detection and sprinkler technology became more advanced and the cost became less. Automatic sprinkler systems and automatic fire alarm systems began to appear in new schools and, soon after, in existing schools. In the 40-plus years from the Our Lady of the Angels fire until now, most schools in Minnesota have gone from almost no fire protection (maybe some manual pull stations) to complete automatic fire alarm systems with smoke detection and/or automatic sprinklers.

In other types of occupancies, especially hospitals, nursing homes, and jails, it has long been known that complete

evacuation was not feasible. These types of facilities relied on a “defend in place” concept where occupants were moved from the area of immediate fire danger but a total evacuation did not take place. This concept was later used in high-rise occupancies where only selected floors near the fire floor were evacuated, not the entire building.

My first concern about total evacuation came about 14 years ago when, as a local fire marshal, I was asked to witness the first fire drill at a newly constructed senior residential building. This was no big deal as I had been to hundreds of fire evacuation drills at schools, dorms, and businesses. Things changed radically in my mind as I watched hundreds of mobility-impaired people try to navigate the corridors and stairways of this building. After 20 minutes of alarms sounding, less than half of the residents had managed to get outside of the building. Two of the residents were injured in the process.

I consulted with other fire officials as to what they had done in similar situations. Some had similar experiences and had developed “nonevacuation” plans for these types of buildings. These plans were specific to the individual buildings and were developed on the basis that the buildings were fully sprinklered and had early warning smoke detection. Since that was the case with the building I was dealing with, a similar plan was put together with the building's management.

So now, back to schools. Since we know that these types of “nonevacuation” plans work in other types of occupancies, why not extend this practice into other types of buildings? Rather than relying on information and strategies from the 1950s, why not use information and technology from the 1990s or 2000s? Perhaps, the complete, total, and immediate evacuation of schools is not absolutely necessary. We must remember that fire drills are just as disruptive to teachers trying to educate students as they can be to fire fighters who must respond. Each fire drill can take 10–20 minutes out of a class period; just like most fire calls to false alarms take 10–20 minutes (or more) from each fire fighter.

Since many schools in Minnesota have automatic smoke detection and/or automatic sprinklers, they are allowed to remove the manual fire alarm pull stations near each exit. They may have to keep a few for fire drill purposes but most can be eliminated. This is based on a desire to reduce false alarms since 98–99% of the fire alarm activations by manual pull stations in schools are false alarms. Besides, manual pull stations are 1950s strategies in the 2000s.

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## Is Evacuation Always Necessary? continued from previous page

The State Fire Marshal Division is presently doing pilot tests in three communities involving about eight school buildings where the schools will no longer go through total evacuation each time the fire alarm activates. These buildings are completely sprinklered and have automatic fire alarm systems with smoke detectors that are addressable (i.e., the detector's location shows up on the fire alarm panel). In addition, these buildings have fire-rated walls that separate the buildings into different fire areas.

Since smoke detection is automatic and much quicker in detecting fires than the old manual fire alarm systems (that required a person to activate them), additional time is available for investigating and decision-making. This allows schools to give students instructions (stay where they are, move to another location within the building, or evacuate) depending on the situation.

Our preliminary reports have been encouraging. We recognize that this will not work in every building or in every school. It has shown some benefits:

- Students and staff now pay attention to fire alarm drills instead of doing the same thing that they always did
- It is much less disruptive to the school
- False alarms have decreased since the alarm is no longer going to mean that students go outside

The fire at The Our Lady of the Angels School had probably been burning for 10–15 minutes before it was noticed. Since there was no automatic detection, the first sign of the fire was when the hallways filled with smoke. Had there been automatic detection students and staff would have probably known about it 8–12 minutes sooner giving them adequate time to evacuate.

Even more impressive is the absence of fire deaths in fully sprinklered buildings. The only experience we have seen with fire deaths in sprinklered buildings are victims who were involved in the ignition (they caused the fire—smoking, open flames, explosions, etc.). Since sprinklers are extremely effective at preventing flashover, they do an excellent job at protecting the other occupants of the building.

As a “fail-safe,” we have told these schools that if in doubt, evacuate—immediately. We hope to be able to report more to you in the near future on how this is working, including a presentation at the MSFCA Conference in October.

One last note: you can find this policy, along with all of the other State Fire Marshal policies and “fact sheets,” on the State Fire Marshal Web site: [www.dps.state.mn.us/fmarshal/mufcweb/index.html](http://www.dps.state.mn.us/fmarshal/mufcweb/index.html). Bookmark that site for your use; it is a great resource.

<sup>1</sup> Cowan, David, and Kuenster, John, *To Sleep With the Angels*. Chicago, Illinois: Ivan R. Dee Publishers, 1996.

## UL Product Directory Improvements

*By Howard Hopper, UL*

Changes in the print editions of UL's well-known product directories have been made in direct response to feedback received from fire and building officials and others interested in product safety certification. These changes have been made in order to make the directories more user friendly, and to provide more complete certification information. In addition, all of the information included in the print editions of the product directories is also available in the Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database). The online directory is updated regularly as new information becomes available.

“The first choice for finding the latest information about UL-certified products, components, and materials is the Online Certifications Directory,” explains Bob Pollock, director of UL Field Reports and Regulatory Services. “Regulatory officials and other users who may not have access to the Internet at the workplace or in the field will be able to consult an improved 2001 edition of the printed directories when making product acceptance decisions or specifying UL-certified products for installations.”

Before, users often had to search through several of UL's printed directories to find the information they needed. As an example, panic hardware for fire-resistance rated doors was included in the UL Building Materials Directory, while panic hardware for non-fire-resistance rated doors was included in the UL Mechanical Equipment Directory. The reorganization of UL's product directories combined categories such as these in a common, easy-to-find location.

Some of the changes to the 2001 print editions of the UL product directories that should be of interest to the fire service include the following:

**Expanded Fire Protection Equipment Directory.** This directory was expanded to become a more complete resource for the fire service. It previously contained primarily fire protection equipment. Product categories related to fire department operations (e.g., fire fighter protective clothing and fire service ladders) were relocated to this directory from other directories. In addition, combustible furnishings such as upholstered

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furniture and plastic pallets that are subject to periodic fire department inspection were also added to the directory.

**Flammable and Combustible Liquids and Gases Equipment Directory.** The Gas and Oil Equipment Directory contained two unrelated types of product categories. Flammable and combustible liquids and gases equipment that are typically regulated by the fire service, and heating, cooling, ventilating, and cooking equipment that are typically regulated by mechanical officials.

The Gas and Oil Equipment Directory has been renamed the Flammable and Combustible Liquids and Gases Equipment Directory to more accurately reflect its contents. Product categories such as storage tanks, hoses, fittings, valves, and related components are included in this directory. The product categories regulated by mechanical officials, such as gas-fired heating equipment, have been relocated into a new Heating, Cooling, Ventilating, and Cooking Equipment Directory.

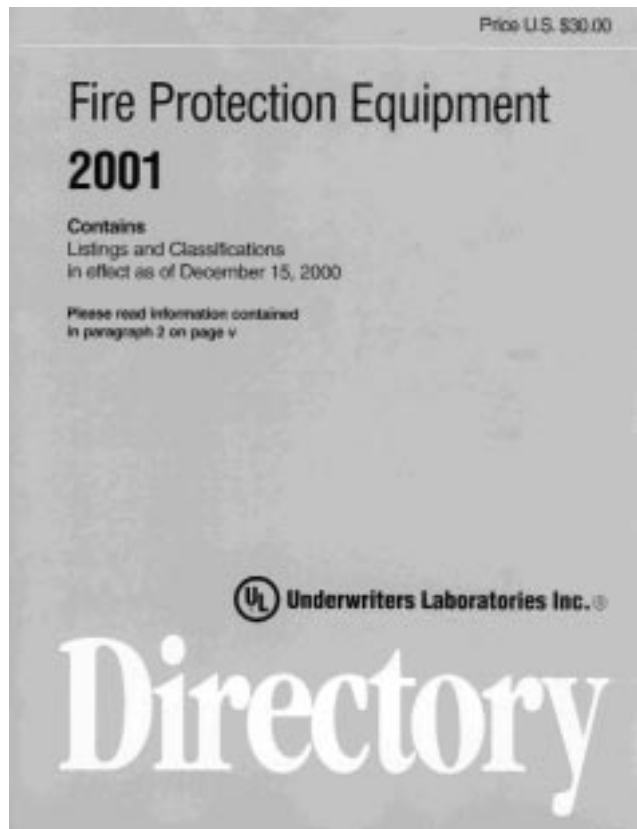
**Fire Resistance Directory.** All fire-resistant rated products, similar products, and related hardware have been consolidated into the three-volume UL Fire Resistance Directory. Volume 2 has been expanded to include electrical protective devices and duct assemblies. A new Volume 3 has been added that includes dampers, fire doors, glazing, and related equipment that previously appeared in the UL Building Materials Directory.

**Building Materials Directory.** This directory has been modified to include product categories that are typically covered by building and life safety codes. For example, exiting appliances (e.g., exit signs and panic hardware), elevator equipment, floor coatings, fireplaces, and chimneys are now included in this directory.

Main Guides, found at the beginning of each UL product directory, have been expanded to provide additional information about the product categories covered in the directory. This includes information about the standards used to investigate products, applicable installation codes and standards, instruction manuals, product markings, and

intended usage. Information included in the enhanced Main Guides is also accessible in the UL Online Certifications Directory.

For additional information, contact Jill Fiocchi at UL's Northbrook, Illinois, office, by e-mail at [Jill.Fiocchi@us.ul.com](mailto:Jill.Fiocchi@us.ul.com) or by phone at (847) 664-2175; or contact UL Regulatory Services staff at any of UL's U.S. offices.



## Utah Chapter Receives Charter

President Ron Farr presents Utah Fire Marshals Association President Dan Andrus with their IFMA Chapter Charter.

# A Management Institute for Fire Marshals

By Jim Crawford, James Marshall, Nancy Orr, and Daniel O'Toole

## Introduction

Planning for a Management Institute to provide continuing *management* education for Fire Marshals and other prevention managers began shortly after a symposium on how to evaluate fire, rescue, and emergency services held in Portland, Oregon, in January 1997.<sup>1</sup> Portland Fire Marshal Jim Crawford conducted a needs assessment to determine what topics, in addition to program evaluation, would constitute a meaningful curriculum. The results were as follows:

- Strategic Planning
- Developing Effective Relationships  
with Elected Officials
- Evaluation of Fire Prevention Programs

These topics make up a complete cycle of Fire and Rescue managerial work: plan, gain elected officials' understanding and support, evaluate results, and plan again.

## The Portland Pilot

The pilot Institute was held in Portland, Oregon, in August 1997. The Monday-through-Friday, 8:30–4:30, format allowed about a day and a half for each topic, as well as introductions and evaluations of each day and of the entire Institute.

On Monday, after a welcome and introductions, participants took the Learning Styles Inventory<sup>2</sup> to get into a self-conscious learning mode and to set the Institute's overall tone. The Inventory focuses on the following learning styles:

- Concrete Experience
- Reflective Observation
- Abstract Conceptualization
- Active Experimentation

The Institute included opportunities for participants to learn using each of the styles. For example, at the end of each day they were asked to take a few minutes that evening to *reflect* on what they had learned. The following morning they were asked to fill out an evaluation form; and a few of them were asked to share their most important learning from the previous day.

*Concrete experience and active experimentation* were fostered by the way in which topics were presented. For example, participants put together components of a strategic plan during the time devoted to that topic, and small groups produced evaluation measures (using the Portland symposium's work as a jumping-off point) during the Evaluation of Fire Prevention Programs sessions.

Developing Effective Relationships with Elected Officials presented top managers or elected officials discussing their views on the topic with the participants. This was mainly *abstract conceptualization*, but after each of the five speakers

the participants broke into small groups to debrief and put together a list of "Critical Elements of Building Partnerships with Elected Officials." A composite list was given to each participant; a concrete product of *reflective observation* and, hopefully, a useful tool back home (*active experimentation*).

The pilot Management Institute participants had a busy week, and part of their feedback was that it was *too many* hours. Other helpful comments focused on the handouts, case studies, and exercises. Taking the daily and the overall evaluations together, what participants focused on was how to more effectively present the information; the three topics themselves were seen as useful. By relying on participant evaluations, the pilot Institute *modeled* what it taught.

## Tucson

The first "regular" institute was held in Tucson, Arizona, in August 1999, with 19 participants in a five-day program. The local hosts were Sedona's Fire Marshal, William Loesche, and the Arizona Chapter of the International Fire Marshals Association.

Major changes from the pilot (again *modeling* what was taught) were as follows:

- Developing Effective Relationships with Elected Officials was handled by one outside presenter and the two instructors (drawing upon their experiences working with and for elected officials).
- An exercise on the final day pulled together the elements of strategic planning and evaluation into a comprehensive package, based on participants' back-home situations.
- The pilot's look at data systems and how to manage them was dropped.
- Each day included more breaks to lessen the "length" of the Institute.

The overall evaluations were strongly positive. Highpoints mentioned were as follows:

- The Learning Styles Inventory
- The participative approach to topics
- The "key words" exercise (a marketing/advertising tool to sharpen "messages")
- The strategic planning process
- Workload-efficiency-effectiveness evaluation measures
- Learning to keep it "short and sweet" with elected officials
- The guest speaker
- Interaction with other participants

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The one recurring suggestion for improving the Institute was to arrange the handouts into a “manual” so that they would be a more powerful learning tool.

### Los Angeles

The most recent Institute was held in Los Angeles, California, in April 2001; there were 32 participants for the two-day program. The local host was the Fire Marshal of the City of Los Angeles, Jim Hill.

This Management Institute focused on two topics:

- Strategic Planning
- Evaluation of Fire Prevention Programs

This was a shorter Institute, with a tighter focus, thus allowing more people to participate (two days being easier to take from busy schedules and tight budgets). And while Developing Effective Relationships with Elected Officials wasn’t covered, the introduction by Los Angeles City Fire Department Chief Bill Bamattre gave participants a stunning glimpse of the “politics” of big city fire prevention.

The Learning Styles Inventory was followed by one longer and two shorter strategic planning processes. Key areas of evaluation (with some emphasis on how to “frame” information for elected officials) were explored, finishing with the Tucson exercise to bring it all together into a useful package. There were fewer exercises in each topic, but essential points were well covered.

In addition to reducing the number of topics (and days), there were two major changes from Tucson: (1) one instructor (instead of two) to keep tuition reasonable, and (2) an Institute “manual” containing all the handouts in a bound volume (the main suggestion from Tucson).

The overall evaluations—as well as numerous comments from participants—were strongly positive. Highpoints mentioned were as follows:

- The group exercises and hands-on activities
- Interaction with other participants
- The Los Angeles Chiefs introductory talk

The following were key suggestions for improving the Institute:

- Make the “key points” wall charts into handouts and include them in the manual
- Number the pages in the manual
- Consider using PowerPoint instead of wall charts
- Have more group exercises

### Conclusion

The International Fire Marshals Association has a well-tested and well-received Management Institute available to its members. The Institute has the flexibility to do the following:

- Cover its three topics extensively in a five-day format
- Cover them in a somewhat less extensive three-day format
- Present two of the three topics in a two-day format

The Institute fosters an exchange of information, expertise, and experience among participants—often the highpoint of their time together. Institute materials, ideas, tools, and techniques can be taken home by participants and used to educate and train members of their organizations, adding a “ripple effect” to the Institute’s impact. And, finally, these gatherings of Fire and Rescue professionals in positive learning environments reinforce the sense of community so vital to the growth and success of the Association and the profession.

### Notes

<sup>1</sup> See Jim Crawford, James Marshall, and Daniel O’Toole, “(Developing) Evaluation Measures for Fire, Rescue, and Emergency Services,” *Fire Marshals Quarterly*, September 1997.

<sup>2</sup> This instrument is based on Kolb et al., *Organizational Psychology: An Experimental Approach*, Prentice Hall, 1974.

## New Project Proposed

The Standards Council has received a request to establish a new project to provide a *Life Safety Code*<sup>®</sup> equivalent document for emerging markets on a worldwide basis, and voted to publish a notice of receipt of the request soliciting comments on the need for the project; those interested in participating in the project, if undertaken; the form the document should take; and other organizations actively involved with the subject matter, as required by 4-1 of the Regulations Governing Committee Projects. Specifically, the Council was soliciting input on approaches to life safety documents that would enhance life safety in developing countries and

provide equivalent levels of safety, taking into account local conditions.

Anyone interested in commenting on these proposed projects is invited to do so in writing. Please include information on resources on the subject matter, the names of those interested in participating on the Committee (if established), the names of other organizations actively involved with this subject, and why there is a need for such a project. Responses should be sent to Codes and Standards Administration, NFPA, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

## Coalition's New Web Site Includes Dramatic Movie of Home Fire

Imagine waking up in the middle of the night to the sound of a smoke alarm. How would you react? How fast could you move? How would you save your family? Visitors to the new Web site, [www.homefiresprinkler.org](http://www.homefiresprinkler.org), designed by the Home Fire Sprinkler Coalition (HFSC), can experience that frightening event in a dramatic six-minute movie that traces the course of a home fire. The reenactment also demonstrates the effectiveness of home fire sprinklers in minimizing property damage and protecting lives.

In the movie, a fire starts in the living room during the night while the family is sleeping. One minute later, the smoke alarm activates. The homeowner wakes up, doesn't smell smoke until going down the stairs, then reaches the first floor to see smoke in the living room and the curtains on fire. Heat activates the fire sprinkler and the fire is under control about two minutes after it starts.

Then, the clock displayed at the top of the screen stops and reverses to when the smoke alarm activates. The movie replays the same home fire, but without sprinkler protection. In less than five minutes, the fire spreads until it reaches "flashover" and the entire living room is engulfed in flames, before fire fighters arrive at the scene.

According to Gary Keith, HFSC chair, the movie was developed to make fire-timeline information more realistic. "For years, we've used charts and data to educate people about how quickly a house fire spreads. The photos and sound effects used in this presentation bring that information to life," Keith said.

The movie also shows how dark and deadly the smoke in a house fire can be. "We want viewers to understand that it is the smoke that kills," Keith said. "Even though the fire started in the living room, thick poisonous smoke spreads throughout the house. You can't see anything when the house is filled with smoke. While the clock is ticking and the fire spreads, people in the house are blinded by smoke as they try to escape. The best way to control the development of smoke is to control the fire with a sprinkler."

Information from the *Scottsdale Report* is also used in the movie. The *Scottsdale Report* is an analysis of fire records

during the first ten years the City of Scottsdale had an ordinance requiring the installation of residential fire sprinklers in all new homes. This information compares the average amount of water used by fire sprinklers to the amount used with fire fighter hoses. It also compares average fire loss in a home protected by fire sprinklers with that of an unprotected home.

While developing the movie, the HFSC sent it to various members of the fire service throughout the country for feedback. Keith said it was very well received. "Members of fire service were anxious for us to post the movie on the Web site so they could use it for community education," Keith added.

Anyone who visits the HFSC Web site can download the timeline movie at no charge, to view when they are not on the Internet and to use for presentations. Viewers do need the "Flash" plug-in, which is also available to download on the Web site.

The HFSC Web site also has facts about residential fire sprinkler systems; a PDF file of the full *Scottsdale Report*; copies of the HFSC's newsletter, *The Solution*; and member information.

The HFSC was founded in 1996 by the American Fire Sprinkler Association (AFSA), the National Fire Protection Association (NFPA), and the National Fire Sprinkler Association (NFSA). Its

mission is to provide accurate information to the public about the life-saving value of residential fire sprinkler protection, particularly in new construction of one- and two-family dwellings. In addition to the three founding associations, other steering committee members include: Canadian Automatic Sprinkler Association (CASA), Sharel Stokes Fire Sprinkler Public Education Foundation, Underwriters Laboratories (UL), and U.S. Fire Administration (USFA), as well as 15 affiliate members.

The HFSC has developed educational material with details about residential home fire sprinkler systems, how they work, why they provide affordable protection, and answers to common myths and misconceptions about their operation. These materials are available upon request by calling (888) 635-7222 or at the HFSC Web site: [www.homefiresprinkler.org](http://www.homefiresprinkler.org).



## Executive Secretary's Report



*Jim Sawyer*

Our thoughts and prayer go out to the families and loved ones of those lost in the terrorist attacks on September 11th. A special thanks to all the fire fighters, rescue personnel, law enforcements officers, and workers who assisted in the rescue and recovery operations.

On a happier note, we would like to congratulate Whitey Leicht as the first recipient of the IFMA Meritorious Service Award. For many years, Whitey has been very active in IFMA and has served as our codes and standards advisor.

We are looking for hosts for the Management Institute for Fire Marshals and the Principles of Fire Protection Engineering Courses. If you are interested, please contact me.

The Fall meeting was a great success. We would like to once again thank the Florida Fire Marshals and Inspector Association and Michigan Fire Inspectors Society for sponsoring the hospitality room.

If you are interested in serving IFMA either on committees, with education, or any other way, please contact any of the board members or myself. We are always looking for extra help.

Please be extra careful. I wish you and your families a safe and joyous holiday season.

## President's Corner



*Ron Farr*

As I prepare this President's Corner I cannot help but think back to September 11, 2001, and the horrific events that took place that day. At the same time there were heroic events that took place that has caused us all to say... "We are Proud to be Americans."

On behalf of the International Fire Marshals Association I would like to extend my deepest sympathy to all those who lost family members and friends in New York City and Washington, DC, and especially to the men and women of the New York City Fire Department for their tragic losses. Our hearts, thoughts, and prayers are with you all as we try to rebuild. Though words alone cannot describe how we as a society feel, it is a start for many. Over the past weeks I have noticed, as I think we all have, a change in how we see or look at life in general. I think many people have become much more caring and giving toward one another. The outpouring of support, in monetary donations, physical labor, materials donations, and the commitment and pride that we all have are an indication that we are a PROUD NATION that will stand tall and survive.

On another note: As the United States, and in particular the State of Utah, prepares to host the 2002 Olympics, a number of members of IFMA are also preparing for the Olympics.

Not as athletes, but as volunteers, with area fire departments such as the Park City Fire District, where a large number of the events will take place. There will be a number of IFMA members, who will be assisting the area fire departments with fire safety issues such as crowd management, fire safety inspections/code enforcement, and fire watch.

IFMA Past President John Robison (Alabama State Fire Marshal) and I had the opportunity to be in Park City, Utah, the first week of October and viewed many of the activities (construction like you can't believe) taking place to prepare the various venue sites for the participants and observers. The only thing I could think of when I saw the many changes that were being made was...WOW. Having been to the Park City area before (one of my favorite places to ski), I could not believe the changes that have been made and those that are yet to be made before the Olympics. Scott Adams, Fire Marshal for the Park City Fire District, who is also a member of the IFMA Board of Directors, certainly is a busy person these days and says he is looking forward to the help. Having talked with individuals who have participated in similar events, I am sure this will be a great experience with many lasting memories.

As we approach the holiday season let us not forget those that have lost their lives in an attempt to make America a better place to live.

# IFMA Merchandise Order Form

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

### IFMA Order Form

**Baseball Hat:** \$15.00 each, includes postage and handling

Number	Cost	Total Cost
_____	\$15	_____

**Golf Shirt:** \$30.00 each, includes postage and handling

Size	Number	Cost	Total Cost
<input type="checkbox"/> Small	_____	\$30	_____
<input type="checkbox"/> Medium	_____	\$30	_____
<input type="checkbox"/> Large	_____	\$30	_____
<input type="checkbox"/> X-Large	_____	\$30	_____
<input type="checkbox"/> XX-Large	_____	\$30	_____

**Lapel Pin:** \$3.00 each, includes postage and handling

Number	Cost	Total Cost
_____	\$3	_____

**Wind Shirt:** \$40.00 each, includes postage and handling

Size	Number	Cost	Total Cost
<input type="checkbox"/> Small	_____	\$40	_____
<input type="checkbox"/> Medium	_____	\$40	_____
<input type="checkbox"/> Large	_____	\$40	_____
<input type="checkbox"/> X-Large	_____	\$40	_____
<input type="checkbox"/> XX-Large	_____	\$40	_____

**Grand Total** \$ \_\_\_\_\_

- Check enclosed, *please make payable to IFMA.*
- Charge my credit card.  MasterCard  Visa  AmEx
- Card #: \_\_\_\_\_
- Card Exp. Date: \_\_\_\_\_
- Signature: \_\_\_\_\_

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Please mail or fax to:

IFMA  
 Attention: Order  
 1 Batterymarch Park  
 Quincy, MA 02269  
 Fax (617) 984-7056



## U.S. Fire Deaths Rise in 2000, NFPA Report Finds

### *The home remains most vulnerable to fire loss*

Interrupting a decades-long decline, total fire deaths rose to 4,045 last year, an increase of 13.3% from the previous year, according to a report released today, entitled *Fire Loss in the U.S. During 2000*, from NFPA. In all, 3,420 fire deaths occurred in the home, an increase of 18.1%. The home, the place where most feel the safest, accounted for 85% of all fire fatalities. "This matches the fire death tolls of 1997 and 1998, which represented a major decrease from years previous," says John R. Hall, Ph.D., NFPA's assistant vice president for fire analysis and research. "It makes the period of 1997-2000 into a plateau, with a roughly level death toll. The long-term decline has often alternated years of decline with plateaus like this."

Nationwide, there was a fire death every 130 minutes. By contrast, when comparable data collection began in 1977, there was a fire death every 71 minutes. Overall, fire deaths have been on the decline for 25 years, thanks to advances including fire detection and alarm equipment, sprinkler systems, safer products, increased public awareness and knowledge of fire-safe behavior.

Fire data collection and interpretation have been central to NFPA's mission for nearly a decade. NFPA's fire analysis helps guide the Association and other concerned parties in tracking how well our safety programs are working and targeting priorities for future initiatives to further reduce fire loss.

"If America is to return to the long-term trend of declining fire losses," says Meri-K Appy, NFPA's vice president for public education, "we need action at local, state, and regional levels. Through our model codes and standards, model safety curricula for schools, and sponsorship of Fire Prevention Week, NFPA has shown—and will continue to show—where we have the greatest need for action and the greatest opportunities for improving safety with small changes in our behavior and design practices."

#### **Other findings from NFPA's report include:**

##### **Fire injuries**

Fire injuries rose to 22,350, an increase of 2.2% from the previous year, but still the second lowest reported fire injury toll of the past quarter-century. Nearly 78% of all fire injuries occur in residences. Nationwide, there was a fire injury every 23 minutes.

##### **Fire incidents**

Last year, there were 1,708,000 fires attended by public fire departments, a decrease of 6.3% from the previous year and the lowest level recorded. Every 18 seconds a fire department responded to a fire somewhere in the United States. There were 505,500 structure fires (down 3.3%), and a structure fire

occurred at the rate of one every 62 seconds. There were 379,500 residential fires (no change), and these fires occurred every 83 seconds. There were 348,500 vehicle fires (down 5.4%), and every 90 seconds there was a vehicle fire. The number of outside fires totaled 854,000 (down 8.3%), and every 37 seconds there was a fire in an outside property.

##### **Property damage**

An estimated \$11,207,000,000 in property damage occurred as a result of fire last year, an increase of 11.8%. This increase is due to the Cerro Grande (Los Alamos), New Mexico, wildland fire with an estimated total property loss of \$1 billion. Without this catastrophic fire, there was little change in property damage from the year before. Some \$9,501,000,000 or 83% of all property damage occurred in structure fires. Half of the total property loss occurred in residential properties.

Full findings from the report will be published in the September/October 2001 issue of *NFPA Journal*, NFPA's member magazine, and on NFPA's Web site, [www.nfpa.org](http://www.nfpa.org) (One Stop Data Shop) later this year.



## NFPA Advises Caution When Using Supplemental Heating Sources

### *Heating equipment leading cause of home fires during winter*

If you plan to use a portable or fixed space heater this winter to offset high heating bills—use extreme caution. Two of every three home heating fires in the United States in 1998, and three of every four related deaths, were attributed to supplemental heating equipment, according to a report released recently by NFPA, entitled *U.S. Home Heating Fire Patterns and Trends*.

While total heating equipment-related home fires declined 18% from the previous year, there were still an estimated 49,200 fires, resulting in 388 deaths, 1,445 injuries, and \$515 million in property damage in 1998. Supplemental heating equipment is the leading cause of home fires during the months of December, January, and February, and trails only cooking equipment in home fires year-round. The types of space heaters involved in these fires include all the major types: portable electric heaters, room gas heaters, portable kerosene heaters, wood stoves, and fireplaces with or without inserts.

“Central home heating systems are not a large part of the total heating fire problem, but space heaters are,” said Meri-K Appy, NFPA’s vice president for public education. “Giving space heaters space—placing them three feet away from anything that can burn—and paying close attention whenever any supplemental heating device is in use can drastically reduce these types of fire incidents.”

Leading reasons for fires starting with space heaters are lack of regular cleaning, leading to creosote build-up in wood-burning devices and associated chimneys and connectors; failing to give space heaters space by installing or placing them too close to combustibles; basic flaws in the construction or design of wood-burning heating equipments; and fueling errors involving liquid- or gas-fueled heating equipment.

NFPA offers the following safety tips when considering supplemental heating sources this winter:

- Space heaters need a three-foot clearance from anything that can burn. Portable space heaters should always be turned off when leaving the room or going to sleep.
- When buying a new unit, make sure it carries the mark of an independent testing lab. Be sure that a qualified technician installs the unit or checks that the unit has been installed properly.
- Wood and coal stoves, fireplaces, chimneys, chimney connectors, and all other solid-fueled heating equipment need to be inspected annually by a professional and cleaned as often as the inspections indicate. Also, a sturdy screen will keep sparks from flying into the room.
- Portable kerosene heaters must be fueled only in a well-ventilated area, away from flames and other heat sources, and only when the device has cooled completely. Use only the type of kerosene specified by the manufacturer for that device, and never use gasoline instead of kerosene. Also, be sure that portable kerosene heaters are legal for home use in your state.
- When turning a heating device on or off, be careful to follow the manufacturer’s instructions. When buying heaters, look for devices with automatic shutoff features.
- Be sure any gas-fueled heating device is installed with proper attention to ventilation, and if unvented gas space heaters are used in bedrooms or bathrooms, they must be small and wall-mounted. Also, LP (liquefied petroleum) gas heaters with self-contained fuel supplies are prohibited for home use by NFPA codes.

For more information on fire safety, please visit NFPA’s Web site at [www.nfpa.org](http://www.nfpa.org).

## Call for Members

The **Committee on Manufacture of Organic Coatings** is seeking members in the interest categories of enforcing authority and insurer. This Committee is responsible for NFPA 35, *Standard for the Manufacture of Organic Coatings*.

The **Committee on Fire Protection for Nuclear Facilities** is seeking members in all interest categories except special expert or user. This Committee is responsible for NFPA 801, *Standard for Fire Protection for Facilities Handling Radioactive Materials*; NFPA 804, *Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants*; and NFPA 805, *Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants*.

The **Committee on Fire Service Training** is seeking members in the interest categories of user, special expert, and enforcer. This Committee is responsible for NFPA 13E, *Recommended Practice for Fire Department Operations in Properties Protected by Sprinkler and Standpipe Systems*; NFPA 1401, *Recommended Practice for Fire Service Training Reports and Records*; NFPA 1402, *Guide to Building Fire Service Training Centers*; NFPA 1403, *Standard on Live Fire Training Evolutions*; NFPA 1404, *Standard for a Fire Department Self-Contained Breathing Apparatus Program*; NFPA 1405, *Guide for Land-Based Fire Fighters Who Respond to Marine Vessel Fires*; NFPA 1410, *Standard on Training for Initial Emergency Scene Operations*;

NFPA 1451, *Standard for a Fire Service Vehicle Operations Training Program*; and NFPA 1452, *Guide for Training Fire Service Personnel to Conduct Dwelling Fire Safety Surveys*.

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

The **Committee on Internal Combustion Engines** is seeking members in all categories except manufacturing. This Committee is responsible for NFPA 37, *Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines*.

The **Committee on Solvent Extraction Plants** is seeking members in the interest categories of equipment manufacturer, insurer, and enforcing authority. This Committee is responsible for NFPA 36, *Standard for Solvent Extraction Plants*.

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

Anyone interested in serving on one of these committees or on any NFPA technical committee should request a technical committee application form from Codes and Standards Administration, NFPA, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.



## Career Brochure Available

Thanks to Shannon Thorson, president of the Oregon Fire Marshals Association, IFMA now has a career brochure. The brochure is available to anyone interested in promoting the field of fire prevention, public fire education, or fire investigation. We will provide the template for you to customize with your organizations information. To obtain the brochures, please contact the Executive Secretary.

## Committees Soliciting Proposals

The committees for the following documents are planning to begin preparation of their respective 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. EDST 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 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.) Please note that for **new documents (P\*)**, a draft copy of the **new document** on which to submit proposals will be available. Copies of **new document (P\*)** drafts are available from Codes and Standards Administration, NFPA, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101, or they may be downloaded from NFPA's Web site at <http://www.nfpa.org/procom/document.html>. 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 18-1995	<i>Standard on Wetting Agents</i>	12/28/2001	A2003
NFPA 20-1999	<i>Standard for the Installation of Stationary Pumps for Fire Protection</i>	12/28/2001	A2003
NFPA 30-2000	<i>Flammable and Combustible Liquids Code</i>	12/28/2001	A2003
NFPA 30A-2000	<i>Code for Motor Fuel Dispensing Facilities and Repair Garages</i>	12/28/2001	A2003
NFPA 33-2000	<i>Standard for Spray Application Using Flammable or Combustible Materials</i>	12/28/2001	A2004
NFPA 34-2000	<i>Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids</i>	12/28/2001	A2004
NFPA 50A-1999	<i>Standard for Gaseous Hydrogen Systems at Consumer Sites</i>	6/28/2002	F2003
NFPA 50B-1999	<i>Standard for Liquefied Hydrogen Systems at Consumer Sites</i>	6/28/2002	F2003
NFPA 51B-1999	<i>Standard for Fire Prevention During Welding, Cutting, and Other Hot Work</i>	12/28/2001	A2003
NFPA 70-2002	<i>National Electrical Code<sup>®</sup></i>	11/1/2002	A2004
NFPA 70E-2000	<i>Standard for Electrical Safety Requirements for Employee Workplaces</i>	12/28/2001	A2003
NFPA 85-2001	<i>Boiler and Combustion Systems Hazards Code</i>	6/28/2002	F2003
NFPA 86-1999	<i>Standard for Ovens and Furnaces</i>	12/28/2001	A2003
NFPA 86C-1999	<i>Standard for Industrial Furnaces Using a Special Processing Atmosphere</i>	12/28/2001	A2003
NFPA 86D-1999	<i>Standard for Industrial Furnaces Using Vacuum as an Atmosphere</i>	12/28/2001	A2003
NFPA 92A-2000	<i>Recommended Practice for Smoke-Control Systems</i>	1/3/2003	A2004
NFPA 92B-2000	<i>Guide for Smoke Management Systems in Malls, Atria, and Large Areas</i>	1/3/2003	A2004
NFPA 115-1999	<i>Recommended Practice on Laser Fire Protection</i>	12/28/2001	A2003
NFPA 221-2000	<i>Standard for Fire Walls and Fire Barrier Walls</i>	1/3/2003	A2004
NFPA 251-1999	<i>Standard Methods of Tests of Fire Endurance of Building Construction and Materials</i>	1/3/2003	A2004
NFPA 252-1999	<i>Standard Methods of Fire Tests of Door Assemblies</i>	12/28/2001	A2003
NFPA 260-1998	<i>Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture</i>	12/28/2001	A2003
NFPA 261-1998	<i>Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes</i>	12/28/2001	A2003
NFPA 274-P*	<i>Standard Methods of Tests to Evaluate Fire Performance Characteristics of Pipe Insulation</i>	12/28/2001	A2003
NFPA 285-1998	<i>Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components Using the Intermediate-Scale, Multistory Test Apparatus</i>	12/28/2001	A2003
NFPA 295-1998	<i>Standard for Wildfire Control</i>	12/28/2001	A2003
NFPA 302-1998	<i>Fire Protection Standard for Pleasure and Commercial Motor Craft</i>	12/28/2001	A2003
NFPA 403-1998	<i>Standard for Aircraft Rescue and Fire Fighting Services at Airports</i>	12/28/2001	A2003
NFPA 412-1998	<i>Standard for Evaluating Aircraft Rescue and Fire Fighting Foam Equipment</i>	12/28/2001	A2003
NFPA 496-1998	<i>Standard for Purged and Pressurized Enclosures for Electrical Equipment</i>	12/28/2001	A2003

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## International Fire Marshals Association

Document No./ Edition	Title	Proposal Closing Date	Meeting Reporting
NFPA 551-P*	<i>Guide for the Evaluation of Fire Risk Assessments</i>	6/28/2002	F2003
NFPA 610-P*	<i>Guide for Safety of Motorsports Venues</i>	12/28/2001	A2003
NFPA 701-1999	<i>Standard Methods of Fire Tests for Flame Propagation of Textiles and Films</i>	1/3/2003	A2004
NFPA 820-1999	<i>Standard for Fire Protection in Wastewater Treatment and Collection Facilities</i>	12/28/2001	A2003
NFPA 853-2000	<i>Standard for the Installation of Stationary Fuel Cell Power Plants</i>	12/28/2001	A2003
NFPA 906-1998	<i>Guide for Fire Incident Field Notes</i>	6/28/2002	F2003
NFPA 1002-1998	<i>Standard for Fire Apparatus Driver/Operator Professional Qualifications</i>	12/28/2001	A2003
NFPA 1021-1997	<i>Standard for Fire Officer Professional Qualifications</i>	12/28/2001	A2003
NFPA 1031-1998	<i>Standard for Professional Qualifications for Fire Inspector and Plan Examiner</i>	12/28/2001	A2003
NFPA 1033-1998	<i>Standard for Professional Qualifications for Fire Investigator</i>	12/28/2001	A2003
NFPA 1141-1998	<i>Standard for Fire Protection in Planned Building Groups</i>	12/28/2001	A2003
NFPA 1620-1998	<i>Recommended Practice for Pre-Incident Planning</i>	12/28/2001	A2003
NFPA 1670-1999	<i>Standard on Operations and Training for Technical Rescue Incidents</i>	6/28/2002	F2003
NFPA 1710-2001	<i>Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments</i>	1/3/2003	A2004
NFPA 1720-2001	<i>Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments</i>	1/3/2003	A2004
NFPA 1963-1998	<i>Standard for Fire Hose Connections</i>	12/28/2001	A2003
NFPA 1965-P*	<i>Standard for Hose Connected Appliances</i>	12/28/2001	A2003
NFPA 1975-1999	<i>Standard on Station/Work Uniforms for Fire and Emergency Services</i>	1/31/2002	F2003
NFPA 1977-1998	<i>Standard on Protective Clothing and Equipment for Wildland Fire Fighting</i>	12/31/2001	F2003
NFPA 1982-1998	<i>Standard on Personal Alert Safety Systems (PASS)</i>	1/11/2002	F2003
NFPA 2001-2000	<i>Standard on Clean Agent Fire Extinguishing Systems</i>	12/28/2001	A2003

P\* Proposed NEW drafts are available from NFPA Codes and Standards Administration, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101, or they may be downloaded from NFPA's Web site at [http://www.nfpa.org/Codes/Current\\_Codes\\_and\\_Standards/Info\\_About\\_Documents/Drafts\\_of\\_Proposed\\_Documents/drafts\\_of\\_proposed\\_documents.html](http://www.nfpa.org/Codes/Current_Codes_and_Standards/Info_About_Documents/Drafts_of_Proposed_Documents/drafts_of_proposed_documents.html).

### UL's SIN Database

The 1999 edition of NFPA 13, Section 3-2.2, requires all sprinklers to include a permanent sprinkler identification mark that identifies a unique model of sprinkler for every change in orifice size or shape, deflector characteristic, and thermal sensitivity. This rule became effective on January 1, 2001.

UL has announced that all of their currently Listed fire sprinklers in the categories of Automatic and Open (VNIV), Residential Automatic (VKKW), and Early Suppression-Fast Response (ESFR) (VNWH), produced after January 21, 2001, are required to be marked with a Sprinkler Identification Number (SIN). The SIN will provide a means to identify the Listed Company, and determine information about the sprinkler such as sprinkler type, K-factor, response type, and the category in which the sprinkler is Listed.

The SINs for all three categories: Automatic and Open, Residential Automatic, and Early Suppression-Fast Response, are now located in a new category "Guide Information for (VNWA), Sprinkler Identification Number (SIN)."

The VNWA category is a list of all SINs and their associated basic information and is presently over 70 pages long. Additional information can be obtained by cross-referencing the SIN to the individual sprinkler Listings. While this list will not apply to products in the field manufactured prior to the adoption of this program, it will address present and future Listed sprinklers.

This new category was established and the list was developed to assist Authorities Having Jurisdiction, Fire Marshals, Fire Inspectors, and Pipe Fitters/Sprinkler installers in identifying the proper sprinkler when installing and maintaining sprinkler systems in accordance with NFPA 13 and NFPA 25.

This information can be accessed through UL's Online Certification Directory Database at [www.ul.com/database](http://www.ul.com/database). Simply select the Category Control Number (CCN) search, select VNWA in the search field, and click on the blue VNWA.GuideInfo link that will appear.

## Structure Fires in Educational Properties

The following information is taken from the June 2001, *U.S. Fire Problem Overview Report*, by Marty Ahrens. The complete section on educational facility fires is on NFPA's web site, [www.nfpa.org](http://www.nfpa.org), under One-Stop Data Shop. In addition to these statistics, NFPA also has a package on school fires containing statistics and selected published incident descriptions. To request a complimentary copy of this package, please contact Nancy Schwartz at (617) 984-7450 or [osds@nfpa.org](mailto:osds@nfpa.org).

Educational properties include: public, private, and parochial schools from nursery school through high school where students attend during the day only; public, private, or parochial boarding schools; trade or business schools; and colleges or universities. Day care centers are considered institutional property; dormitories and fraternity or sorority houses are residential. These categories are not included here. Only fires reported to public fire departments are included in these statistics.

**7,600 structure fires were reported per year.** The average number of structure fires, casualties, and direct property damage per year from 1994 through 1998 for educational properties are listed below. An average of 7,600 reported structure fires caused one civilian death, 176 civilian injuries, and \$82.6 million in direct property damage per year. Three-quarters of the structure fires in this category occurred in nonresidential schools.

**1.3% of structure fires occurred in educational properties.** Overall, the 7,600 fires in educational properties accounted for 1.3% of the 567,100 structure fires, less than 0.1% of the 3,744 civilian structure fire deaths, 0.8% of the 21,293 civilian structure fire injuries, and 1.1% of the \$7.2 billion in direct property damage per year during that time period.

**Since 1980, these structure fires fell 56%.** Structure fires in educational properties fell 56% from 15,100 in 1980 to 6,700 in 1998. From 1997 to 1998, structure fires in these occupancies declined 13% from 7,700 in 1997. In comparison, structure fires of all types declined 51% from 1980 to 1998. From 1997 to 1998, total structure fires fell 6%.

**Half of these structure fires were incendiary or suspicious.** Half of the structure fires in educational properties were incendiary or suspicious. This is substantially higher than the figure of 27% incendiary or suspicious causes seen in non-residential structure fires overall during the same period. FBI statistics for the same period show that about half the people arrested for arson were under 18 years old.\* Juveniles play a major role in the school arson problem. Schools need to be aware of the potential for juvenile arson, and juvenile fire setter programs are needed to address the problem.

The leading cause of these civilian fire injuries was also incendiary or suspicious.

**Structure Fires in Educational Properties  
1994–1998 Annual Averages**

Occupancy	Fires	Civilian Deaths	Civilian Injuries	Direct Property Damage (in Millions)
Nursery school through high school or other nonresidential school	5,800	0	131	\$58.5
Boarding or other residential school	400	1	5	\$9.1
Trade or business school	400	0	9	\$4.4
College or university	800	0	30	\$8.8
Unclassified or unknown-type educational property	200	0	1	\$1.9
<b>Total</b>	<b>7,600</b>	<b>1</b>	<b>176</b>	<b>\$82.6</b>

*Note:* These are fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. Fires are rounded to the nearest hundred, deaths and injuries to the nearest one, and direct property damage to the nearest hundred thousand dollars. Sums may not equal totals due to rounding errors. Damage has not been adjusted for inflation.

*Source:* National estimates based on NFIRS and NFPA survey.

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**Lavatories, locker rooms, and cloakrooms ranked first among the areas of origin.** During the 1994–1998 time period, 24% of the educational property structure fires started in lavatories, locker rooms, and cloak rooms; 10% started in hallways, corridors, or malls; 8% began in classrooms or small meeting rooms; and 7% started in the kitchen. The top three areas for fires held the same rankings for incendiary and suspicious structure fires in these properties.\*\*

**Historic fires are reminders to practice fire safety in schools.** Today, most school children practice escaping from the classroom building in scheduled fire drills and it is almost unheard of for a child to die in a school fire.

Three devastating fires earlier in the century demonstrate the importance of maintaining fire safety in these buildings. A 1937 gas explosion in the New London, Texas, gas explosion killed 294 people. The 1908 Lakeview Grammar School fire in Collinwood, Ohio, claimed 175 lives and the 1958 fire in Our Lady of Angels Grade School in Chicago, Illinois, killed 95 people.

**66% of these fires occurred in properties with smoke alarms.** Almost two-thirds of the reported structure fires in educational properties (66%) during the 1994–1998 time period occurred in properties with smoke or other fire alarms. Automatic suppression systems were present in only 24% of these fires. The average estimated direct property damage was almost five times as high when no automatic suppression system was present.

**10,200 outside fires and 1,000 vehicle fires were reported on these properties.** During the same five-year period from 1994 through 1998, an average of 10,200 outside and other fires per year in or on educational properties caused an average of 22 civilian injuries, and \$2.2 million in direct property damage per year. An average of 1,000 vehicle fires on these properties caused three civilian injuries and \$2.4 million in direct property damage per year.

\* FBI's *Crime in the U.S. series*.

\*\* John R. Hall, Jr., *U.S. Arson Trends and Patterns*, Quincy, MA: NFPA Fire Analysis and Research Division, March 2001, p. 42.

**Fire Protection Features in Educational Property Structure Fires  
Reported to Public Fire Departments:  
1994–1998 Annual Averages**

Percent of fires in buildings with smoke or other fire alarms present	65.8%
Percent of fires in buildings having smoke or other fire alarms in which devices were operational	79.2%
Percent of fires in buildings with operational smoke or other fire alarms (product of first two statistics)	52.1%
Percent of fires in buildings with automatic suppression system	23.9%
Deaths per 1,000 fires with automatic suppression system present	0.0
Deaths per 1,000 fires with no automatic suppression system present	0.0
Reduction in deaths per 1,000 fires when automatic suppression systems were present	NA
Average loss per fire when automatic suppression system was present	\$2,802
Average loss per fire with no automatic suppression system	\$12,912
Reduction in loss per fire when automatic suppression systems were present	78.3%

*Source:* National estimates based on NFIRS and NFPA survey.

*continued on next page*

## Structure Fires in Educational Properties continued from previous page

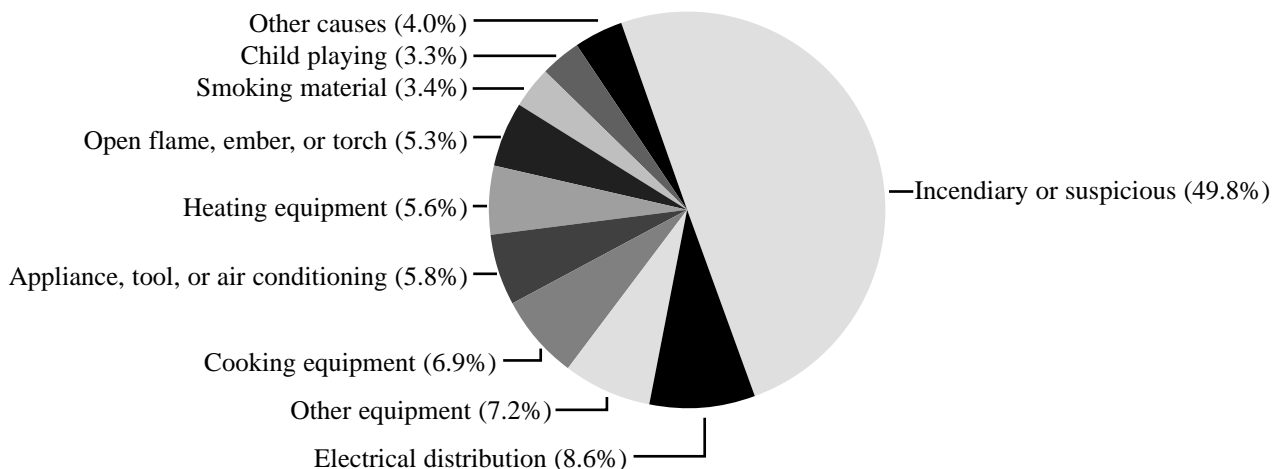
Structure Fires in Educational Properties, by Year: 1980–1998

Year	Fires	Civilian Deaths	Civilian Injuries	Direct Property Damage (in Millions)
1980	15,100	4	173	\$104.1
1981	13,700	0	362	\$139.1
1982	11,900	5	287	\$87.2
1983	10,000	0	170	\$61.4
1984	10,300	0	171	\$96.6
1985	10,900	0	168	\$112.3
1986	9,600	7	333	\$81.6
1987	8,800	11	149	\$108.9
1988	8,000	0	85	\$118.2
1989	7,400	2	226	\$93.1
1990	7,000	2	138	\$97.7
1991	7,700	0	200	\$78.5
1992	8,400	0	153	\$79.2
1993	7,900	0	192	\$109.8
1994	8,500	0	188	\$101.8
1995	7,700	2	187	\$109.0
1996	7,500	1	209	\$84.0
1997	7,700	3	174	\$48.2
1998	6,700	0	122	\$69.9
1980–1998 Annual average	9,200	2	194	\$93.7
1994–1998 Annual average	7,600	1	176	\$82.6

*Note:* These are fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. Fires are expressed to the nearest hundred, deaths and injuries are rounded to the nearest one, and direct property damage is rounded to the nearest hundred thousand dollars. Sums may not equal totals due to rounding errors. Damage has not been adjusted for inflation.

*Source:* National estimates based on NFIRS and NFPA survey.

Causes of Educational Property Structure Fires  
1994–1998 Annual Averages



*Source:* National estimates based on NFIRS and NFPA survey.

## NFPA/IFMA Regional Fire Code Development Committee Spring 2002 Meeting Schedule

To encourage greater fire service participation in the NFPA Codes and Standards Making System, NFPA has established four Regional Fire Code Development Committees. The members of these committees are from the fire service in your area. The committees are responsible for developing proposals for changes to NFPA Codes and Standards, reviewing the Report on Proposals (ROP) and developing comments on proposed changes, and act as liaisons to their region's fire service for inputting changes to NFPA Codes and Standards. The meetings will be held on the following dates and times.

### **Northcentral**

February 26–27, 2002: Hilton Garden Inn Cleveland Airport, Cleveland, OH, 8:30 a.m. to 4:00 p.m.

### **Northeastern**

March 14–15, 2002: Embassy Suites Hotel BWI Airport, Baltimore, MD, 8:30 a.m. to 4:00 p.m.

### **Southern**

March 19–20, 2002: Quality Hotel & Suites, Birmingham, AL, 8:30 a.m. to 4:00 p.m.

### **Western**

March 26–27, 2002: Embassy Suites Orange County Airport, Irvine, CA, 8:30 a.m. to 4:00 p.m.

There is no cost to attend the meeting. You are responsible for all costs associated with your travel. If you are interested in attending, please complete the attached form and return by January 31, 2002, or contact Steven Sawyer at (617) 984-7423 for additional information.



## Spring 2002 NFPA/IFMA Regional Fire Code Development Committee Meeting Attendance Form

Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

I plan on attending the Spring 2002  Northcentral  
 Northeastern  Southern  Western Regional Fire Code  
 Development Committee Meeting

Please return by January 31, 2002 to:

Steven F. Sawyer  
 NFPA  
 1 Batterymarch Park  
 Quincy, MA 02269-9101  
 or Fax: (617) 984-7056

## Coming Events

### December

2-6 Electrical Equipment of Industrial Machinery,  
San Diego, CA

### 2002

#### January

7-8 TCC Automatic Sprinkler, Orlando, FL

9-11 NFPA Standards Council, Fort Lauderdale, FL

29-31 TCC Building Code, La Jolla, CA

#### February

18-20 Electrical Safety Requirements for  
Employee Workplaces, Indialantic, FL

20-March 3 NFPA Committee Weeks,  
San Francisco, CA

20-22 Finishing Processes

21-22 Structural Fire Fighting Protective  
Clothing and Equipment

24-26 Fire Service Occupational Medical  
and Health

25-27 Halon Alternative Protection Options

25-26 Laser Fire Protection

26-27 Fire Pumps

26-March 1 Water Additives for Fire Control and  
Vapor Mitigation

27 Telecommunications

28-March 1 Electrical Equipment in  
Chemical Atmospheres

March 1-3 Hazardous Materials Protective Clothing  
and Equipment

26-27 *Northcentral Regional Fire Code  
Development Committee, Cleveland, OH*

#### March

8-9 *IFMA Board Meeting,  
Emmitsburg, MD*

14-15 *Northeastern Regional Fire Code  
Development Committee, Baltimore, MD*

19-20 *Southern Regional Fire Code Development  
Committee, Atlanta, GA*

26-27 *Western Regional Fire Code Development  
Committee, Orange County, CA*



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