ENJOY YOUR POSSIBILITIES







RASCOflex is the flexible sprinkler drop which sets a new standard for simplicity. The innovative design positions the sprinkler in the center of the ceiling tile and the correct height, significantly reducing installation times. This incredibly efficient attachment is available in 6 different lengths with options for 2 different reducers, 2 outlet nipples, and a nylon tie for installation convenience. Complete sets come out of the box and ready to install to multiple ceiling grid types. For complete product details, please visit our website, **reliablesprinkler.com**.





ON THE COVER

Jay Livingston (c) receives the 2018 Golden Sprinkler Award from NFSA President Shane Ray (I) and Board Chair Kent Mezaros (r)

ADVERTISERS

| 21 |
|--------|
| 28 |
| 17 |
| 15 |
| 3 |
| 61 |
| 5 |
| IBC |
| ВС |
| 34, 35 |
| 62 |
| 29 |
| 32 |
| IFC,6 |
| 26 |
| 30 |
| 36 |
| 2 |
| |

EDITOR

JOANNE GENADIO

DESIGNER

JOHN L. SULLIVAN/SULLIVANDesign

NFSM (ISSN 1050-4958) (USPS 524-010) is published six times a year (February-April-June-August-October-December) by the National Fire Sprinkler Association, Inc., 514 Progress Drive, #A, Linthicum Heights, Maryland 21090.

Telephone: (443) 863-4464. Subscription free to all NFSA members and member

©2018, NFSA, Inc.

Second-Class postage paid at Mahopac, NY.

POSTMASTER: Send address changes to: NFSA, 514 Progress Drive, Suite A. Linthicum Heights, Maryland 21090



National Fire Sprinkler Magazine

July - August 2018 • No. 209

FEATURES

Growing Pains - The Challenge of Fire Protection Design in a Changing Environment

By April M. Musser

NFPA 13 2019 Edition: A Major Revamp of the Standard 27 that Started it All

By Russell B. Leavitt

31 Born in Fire: Scottsdale's Revolutionary Fire Sprinkler **Ordinance Continues to Save Lives** submitted by Jim Ford

37 2018 NFSA Annual Seminar Business & Leadership Review

47 **Coupling Design Evolution Helps Reduce Installation Time**

By Sandra Lippka and Lucas Eidenmuller

DEPARTMENTS

- Calendar
- From the President's Desk by Shane Ray The Energy of the Industry
- From the Chairman's Desk by Kent Mezaros So...How You Doin'?
- **Contractor's Cue** 10
- 12 **Technically Speaking** - by Mark Hopkins, P.E. Reducing Electrical Exposure During Fire Pump Inspection, Testing and Maintenance NFPA 25 TIA 17-2
- 16 Codes Corner - by Jeff Hugo 2021 IBC & IFC Mid-Cycle Development
- **New Members** 20
- 23 Notes from the Fire Scene - by Vickie Pritchett

The Power of Positive

- 49 **IteM** - by Vincent Powers Third-Party Inspection Reporting
- Social Scene by Joanne Genadio 51 Don't Tweet While on Ambien
- **52 Chapters in Action**
- **54 HQ News**
- 54 People
- **Sprinklering of News 55**
- **59 Regional Roundup**
- **67** Letters





Complete Foam Suppression Systems from Viking

Everything for flammable liquid fire protection from one trusted source

Call Viking with your next foam suppression system challenge. Viking's wide range of bladder tanks, discharge devices, grooved and flanged ratio controllers, industrial heat and flame detectors, multi-hazard release control panels, and miscible and non-miscible foam concentrates are FM Approved and UL Listed as complete, integrated systems. As with all Viking products, it's performance you can trust.

Viking Deluge Valves and Halar® Coated Concentrate Control Valves are at the heart of every system – simple, dependable, and time-tested in applications around the world. From oil refineries to liquid fuel storage to power generation, Viking's integrated system components and experienced technical service and support staff will deliver at every stage of your project.



For aircraft hangar and helipad protection, ask about the patented Viking Grate Nozzle. This unique design is installed in the floor trench to quickly distribute foam where aircraft fuel spills typically occur.



Viking foam storage bladder tanks are available in 25 gallon to 5,250 gallon capacities, with 175 psi and 232 psi standard approved pressure ratings - FM Approved, UL Listed, and CE Compliant.

www.viking group in c.com

Trusted above all.™





NATIONAL FIRE SPRINKLER ASSOCIATION, INC.

SHANE RAY

BOARD OF DIRECTORS:

KENT MEZAROS, Chair Quick Response Fire Protection

JAMES BOULANGER, Vice-Chair Patriot Fire Protection

BRUCE LARUE, Treasurer Potter Electric

JON ACKLEY Dalmatian Fire, Inc.

KEVIN MICHAELIS Johnson Controls

AARON BENNETT RCI Systems, Inc

KEN BRINKLEY Music City Fire Sprinkler

BUCK BUCHANAN Globe Fire Sprinkler Corporation

BOB BUSSIERE

DON DELUCA SRI Fire Sprinkler Corporation

KEVIN T. FEE Reliable Automatic Sprinkler Company

CLARK GEY Wayne Automatic Fire Sprinklers

GREGG HUENNEKENS

Kauffman Company JOHN KAUFFMAN III

Kauffman Company

JAMES LEWIS American Fire Sprinkler Corporation

CONOR KAUFFMAN - Non-Voting

HAROLD NOTHHAFT II L. Nothhaft & Son

JAMES GOLINVEAUX Viking Group

SHANE RAY

LAWRENCE THAU Victaulic Company

JACK THACKER Shambaugh and Son

STEVE ULMER APi Group

TERRY VICTOR Grinnell Fire Protection Solutions

ZARKO OGNJENOVIC

STAFF:

SHANE RAY

SENIOR POLICY ADVISOR JIM DALTON

SENIOR VICE PRESIDENT OF INDUSTRIAL RELATIONS AND GENERAL COUNSEL FRED BARALL

VICE PRESIDENT OF ENGINEERING MARK HOPKINS

DIRECTOR OF FINANCE & ADMINISTRATION ALEXANDER SIU

DIRECTOR OF OUTREACH & GOVERNMENT

VICKIE PRITCHETT

DIRECTOR OF OPERATIONS **DENNIS WOOD**

DIRECTOR OF FIELD OPERATIONS

GARY WEST

Director of Codes and Public Fire Protection JEFF HUGO

DIRECTOR OF TRAINING JOHN B. CORSO

TECHNOLOGY SERVICES MANAGER JAMES ARCHER

MANAGER OF INSTALLATION STANDARDS ROLAND ASP

MARKETING MANAGER & NFSM EDITOR

JOANNE GENADIO

MANAGER OF ENGINEERING SERVICES ROBERT UPSON

LABOR RELATIONS MANAGER & ASSOCIATE

TOR CHRISTENSEN

DERRICK SAWYER

ITM SPECIALIST VINCE POWERS

SPECIAL PROJECTS MANAGER CALEB ARMBRUST

MEMBERSHIP AND OUTREACH COORDINATOR ABBIE BOEING

CANDACE JONES

REGIONAL MANAGERS:

LORRELL BUSH CYNTHIA GIEDRAITIS DOMINICK KASMAUSKAS **BRUCE LECAIR** SUZANNE MAYR WAYNE WAGGONER MICHAEL YOUNG HOLLY GARVEY

STATE COORDINATORS:

TOM BRACE FRANK ELLIS MARTY KING **BOB TINUCCI**

FIELD SERVICE COORDINATORS:

ROB GEISLINGER TERIN HOPKINS RON RITCHEY JOHN WATERS

IP DIRECTORS:

CHICAGO - TOM LIA NEW JERSEY - DAVE KURASZ

IP SPECIALISTS:

LOS ANGELES - BOB ROWE ST. LOUIS - WALLY MILLER JOHN LAVENTURE

LOCAL COORDINATORS

ERIK HOFFER-IL MICHAEL WILSON-NJ LOU HECHT-ST. LOUIS

ACCOUNTING:

MIAISHIA McKENZIE MELISSA LUTZI CHELSEA DIGGS

FIRE PROTECTION STORAGE SYSTEMS

TecTank*

AQUA TORE



- > 125 Years of Experience
- > EMR Rate of .68
- > 350,000 Installations in over 125 Countries





EPOXY COATED



GLASS-FUSED-TO-STEEL



GALVANIZED

FIRE WATER TANKS FOR COMMERCIAL, INDUSTRIAL AND MUNICIPAL APPLICATIONS

With 125 years of history, CST is the firmly established leader in bolted and factory-welded steel tanks.

- > Constructed in 1/3 the time of field-welded saving time and money
- > Dedicated Project Managers and Engineers save time and reduce risks with dedicated professionals and integrated solutions
- > Meet or exceed NFPA 22, FM, USACOE and other industry standards
- All CST tanks are factory coated in environmentally controlled conditions at ISO Certified facilities
- > The Green alternative to field-welded tanks No VOC's

WORLD RECOGNIZED LEADER IN FIRE PROTECTION WATER STORAGE TANKS



EVENTS OF INTEREST TO NFSA MEMBERS

7/9/2018

Two Week Layout Technician Training Baltimore, MD

7/16/2018

NFSA Layout Technician - Blended Learning In Class Practicum Baltimore, MD

9/18/2018

Sprinkler Installation Requirements Austin, TX

9/19/2018

Introduction to NFPA 20 and NFPA 25 Austin, TX

9/20/2018

Advanced Hydraulics Austin, TX

10/15/2018

Two Week Layout Technician Training Seattle, WA

10/22/2018

NFSA Layout Technician - Blended Learning In Class Practicum Seattle, WA

12/4/2018

Rough and Final Inspections of Fire Sprinkler Systems Millburn, NJ

12/5/2018

Rough and Final Inspections of Fire Sprinkler Systems Conshohocken, PA



THE TEAM YOU CAN TRUST

We believe your fire protection supplier should be willing to stand the heat right by your side. Our team of over 900 associates is ready to help with world-class customer service that goes above and beyond to ensure your success. When you choose Ferguson Fire & Fabrication, you're not just purchasing material – you're creating a bond that's fireproof.



THE FIRST OF ITS KIND MODEL G5-80F



FM Approved K8.0 (115 metric) flat plate concealed sprinkler. Available with standard finish or stainless steel clad cover plate, with or without gasket. Offered in 165°F or 212°F temperature rating. Additional information on the Model G5-80F can be seen in Bulletin 034 on our website at **reliablesprinkler.com**



From the President's Desk

Shane Ray

The Energy of the Industry

on't we all need positive events and moments in our lives and in our industry to increase the energy level? What does the energy level increase do for you, for your company, your family?

I can only speak for me, but I left the Annual Business & Leadership Conference knowing that it was an energy event for me, and I believe for the fire sprinkler industry. Why for me and my belief for the overall industry? *YOU!*

You are the energy of the industry. You transfer that energy to those who are honored to serve you through the Association, as well as your customers, your employees, AHJs, political leaders, and especially your families, inside and outside the industry. All of these groups get a source of energy from you. Jon Gordon gave us a lesson on the power of posi-



"You are the energy of the industry. You transfer that energy to those who are honored to serve you through the Association, as well as your customers, your employees, AHJs, political leaders, and especially your families inside and outside the industry."

tive and told us his personal story of how he had to focus to be positive, that it wasn't natural for him. He also shared what a difference in his life and his career he had observed because of this positive.

I hope you have a lot of positive going on in your life and your career; We certainly have a lot of positive going on in the fire sprinkler industry. This positive showed through at the Annual Seminar, especially the Annual Awards Banquet. To honor Jay Livingston as the Golden Sprinkler Award recipient and induct Rich Ackley, Neil Cahill, Frank Fee III, John Joyce, George Laverick, Cary Nichol and Art O'Neil into the Hall of Fame, what a positive energy for our industry. Seeing George Stanley recognized for his service in the technical arena was a highlight as well, with his acceptance of the Russell P. Fleming Technical Service Award.

Speaking of positive energy and awards, it was such an honor to see Chief Charles Hood of the San Antonio Fire Department receive the Leadership in Public Safety Award for what I call his "layers of leadership" to better protect the citizens, visitors, and firefighters of San Antonio. It was also a special honor for me to present the President's

Award to a group of individuals who have been a positive energy for our industry for years and who create a more positive energy for us daily on Capitol Hill. These individuals are Jim Dalton and Vickie Pritchett of NFSA, as well as Andy Quinn, Sean Carroll and Evan Davis. These are the key players who have ensured fire sprinklers were included in tax reform.

Coming into, during, and following the Annual Seminar and Business & Leadership conference, there is a high energy. We work every day on your behalf in legislation, regulation, codes/standards, public relations, media relations, marketing, education, training and overall increased public and AHJ awareness. Our efforts and your quality work creates an enormous energy in our industry, and protects property every single day.

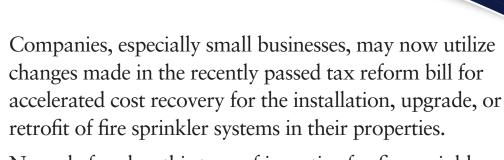
We will strive to keep up our part of this energy level and to keep competition, cost, and confusion down. Cooperation is a key component to insuring our mission and to maintaining high energy that has high impact and positive outcomes.•

A grateful,

Shane Ray, *President*

The Federal Government Provides A Tax Incentive to Protect Lives and Property with Fire Sprinklers





Never before has this type of incentive for fire sprinkler systems been available. Previously, fire sprinkler systems were depreciated over 39 years in commercial buildings and 27.5 years in residential structures.

There is now a significant incentive that potentially would allow for immediate cost recovery!

The National Fire Sprinkler Association encourages business and industry owners to contact their tax professionals and refer them to the changes in Section 179 of the recently passed tax reform legislation (P.L. 115-97).

Protect Lives — Protect Your Property — The Time has Come!



Find a local fire sprinkler contractor at www.nfsa.org

From the Chairman's Desk

Kent Mezaros

So...How You Doin'?

aving recently returned from what appeared to be a very successful NFSA Business & Leadership Conference in Ft. Lauderdale, I figured I would throw out a feeler (think Joey from Friends but here in Jersey its actually the way we speak) and ask you - How You Doin'?

As the new Chair of the Board I think it is important to take the temperature of our members, relay whatever information I can obtain to the rest of the Board and NFSA staff, and try to best accommodate our members' needs. I did get the chance to speak to many of you who attended our seminar in early May, and for most, spirits were quite high. We're working on eight years of solid growth in the sprinkler industry so one would expect that to be the case. However, even when times are robust, I figure NFSA needs to be looking out for its members, so I'm looking for input. What can NFSA do to better serve you?



When one is a member of a trade association one expects to get some bang for their buck. As a trade association, you must understand you better deliver some benefit to your members if you want them to remain members. So how does NFSA membership benefit us (remember I'm a member also)? Well, it would have been quite difficult for an individual company to stay the course and continue pushing the Fire Sprinkler Incentive Act as the NFSA did for 15 years, while waiting for some sort of tax reform to take place that it could get attached to.

Luckily, NFSA had the resources and wherewithal to do so. That is our dues at work. Both Jim Dalton and the Board of Directors for having faith in Jim Dalton's foresight, should be commended in that instance.

You can reach me at: kmezaros@qrfpss.com kent@quickresponsefireprotection.com

Further, NFSA allows our industry to be heard. Heard politically, heard in the Code Adoption Process, and possibly most importantly, heard amongst ourselves as contractors, suppliers and manufacturers. For many years, NFSA's engineering staff and leadership have helped craft the widespread acceptance of fire sprinklers. Many of the previous leaders of NFSA were recognized as our country's (and even

globally) experts in fire protection. We need to continue in that tradition. We must continue that tradition.

So, in order for NFSA to continue to be the voice of the fire sprinkler industry, I ask you members how you are doing? What is it that NFSA could, or should be doing for you? What do you struggle with, and what is it that we no longer need to worry about? My email address is **kmezaros@qrfpss.com** or **kent@quickresponsefireprotection.com** and I look forward to hearing from you. I am smart enough to know that I am not smart enough to know all there is to know! In fact, much of what I have learned over the years has come from listening to others. Hearing questions raised, horror stories, or successes shared by other competitors is often the best means to improve your own day to day operations. Please do not hesitate to share your thoughts with me. Positive, negative, wild new ideas or simple strategies that have worked for you in the past, all will be appreciated.

Interaction between our own members is paramount to our industry's success. The fact that we have contractors, suppliers and manufacturers sitting at the same table during our Board meetings makes us both a strong and diverse group. Throw in the inclusion of professional members in our organization, union and non-union contractor members of almost equal count, and the varied experience of our NFSA staff and we are well positioned to address whatever may come down the pike.

I look forward to your comments and promise that I will share your thoughts so you too will have the ability to shape our industry's future. Thank you for your membership and continued support.

Respectfully yours,

Kent Mezaros, Chairman

CONTRACTOR'S CUE

Subcontractor Claims and the New York State Lien Law

By Stuart Zisholtz

(Editor's Note: Stuart Zisholtz comments on New York State Law)

Recently, we have seen an influx of claims by subcontractors where the General Contractor received funds and used those funds for other purposes. These claims fall under the trust provisions of the New York State Lien Law.

The New York State Lien Law is unique in that it declares funds received by an owner from a financial institution as trust funds, for the benefit of the general contractor and subcontractor.

When those funds are paid to the general contractor, they become trust funds for the benefit of the subcontractor.

The harsh remedy of diverting trust funds is specifically addressed in the New York State Lien Law. The result of a diversion of trust funds may constitute personal liability of the officers, directors and shareholders of the corporation. The New York State Lien Law also declares such diversion as a larceny with criminal implications associated with it.

In certain circumstances, the District Attorney will prosecute a diversion of trust funds. In a civil matter, the lawsuit must be brought as a class action with the individual officers, directors and shareholders named as defendants.

A diversion occurs when funds are specifically paid to an owner or general contractor and utilized for purposes other than paying the contractors, subcontractors and suppliers on the specific project. If the funds are used for other projects or for other reasons, it may result in a claim for diversion of trust funds.

The purpose of this article is to clarify the mistaken belief that a general contractor can close up shop and walk away without any repercussions. A debt can continue to haunt a general contractor and an owner who deliberately avoids paying a debt and diverts the funds to the detriment of hard-working subcontractors and suppliers.

Never let your lien time run out!

The Cyber-Security Training Tips Your Business Has Been Looking For

By Kathy Powell

Strictly Enforce a Multi-Tiered IT Security Plan for all Staff. As new threats arise, it is imperative to keep policies up to date to protect your business. Your employee handbook needs to include a multi-tiered IT security plan made up of policies for which all staff, including executives, management and even the IT depart-

ment are held accountable.

Acceptable Use Policy — Specifically indicate what is permitted versus what is prohibited to protect the corporate systems from unnecessary exposure to risk. Include resources such as internal and external e-mail use, social media, web browsing (including acceptable browsers and websites), computer systems, and downloads (whether from an online source or flash drive). This policy should be acknowledged by every employee with a signature to signify they understand the expectations set forth in the policy.

Confidential Data Policy — Identifies examples of data your business considers confidential and how the information should be handled. This information is often the type of files which should be regularly backed up and are the target for many cybercriminal activities.

E-mail Policy — E-mail can be a convenient method for conveying information. However, the written record of communication also is a source of liability should it enter the wrong hands. Having an e-mail policy creates consistent guidelines for all sent and received e-mails and integrations which may be used to access the company network.

BYOD/Telecommuting Policy - The Bring Your Own Device (BYOD) policy covers mobile devices as well as network access used to connect to company data remotely. While virtualization can be a great idea for many businesses, it is crucial for staff to understand the risks smart phones and unsecured WiFi present.

Wireless Network and Guest Access Policy - Any access to the network not made directly by your IT team should follow strict guidelines to control known risks. When guests visit your business, you may want to constrict their access to outbound internet use only for example and add other security measures to anyone accessing the company's network wirelessly.

Incident Response Policy — Formalize the process the employee would follow in the case of a cyber-incident. Consider scenarios such as a lost or stolen laptop, a malware attack or the employee falling for a phishing scheme and providing confidential details to an unapproved recipient. The faster your IT team is notified of such events, the quicker their response time can be to protect the security of your confidential assets.

Network Security Policy — Protecting the integrity of the corporate network is an essential portion of the IT security plan. Have a policy in place specifying technical guidelines to secure the network infrastructure including procedures to install, service, maintain and replace all on-site equipment. Additionally, this policy may include processes around password creation and storage, security testing, cloud backups, and networked hardware.

Exiting Staff Procedures — Create rules to revoke access to all websites, contacts, e-mail, secure building entrances and other corporate connection points immediately upon resignation or termination of an employee despite whether or not you believe they hold any malicious intent towards the company.

Training is Not a One Time Thing — Keep the Conversation Going- Employee cyber security awareness training dramatically reduces the risk of falling prey to a phishing e-mail, picking up a form of malware or ransomware that locks up access to your critical files, leak information via a data breach and a growing number of malicious cyber threats that are unleashed each day. Untrained employees are the greatest threat to your data protection plan. Training once will not be enough to change the risky habits they have picked up over the years. Regular conversations need to take place to ensure cooperation to actively look for the warning signs of suspicious links and e-mails, as well as how to handle newly developing situations as they happen. Constant updates about the latest threats and enforcement of your IT security plan creates individual responsibility and confidence in how to handle incidents to limit exposure to an attack.

Training Should Be Both Useful Personal and Professional to

Stick — Create regular opportunities to share topical news about data breaches and explore different cyberattack methods during a lunch and learn. Sometimes the best way to increase compliance is to hit close to home by making training personal. Chances are your employees are just as uninformed about their personal IT security and common scams as they are about the security risks they pose to your business. Expand on this idea by extending an invitation to educate their entire families about how to protect themselves from cybercrime during an after-hours event. Consider covering topics such that may appeal to a range of age groups such as how to control the privacy and security settings on social media, online gaming, etc., and how to recognize the danger signs of someone phishing for personal information or money both via e-mail and phone calls. Seniors and young children are especially vulnerable to such exploitation.

Don't Make a Hard Situation Harder — Remember you want red flags reported. Making ongoing security training a priority will greatly reduce repeat errors and prevent many avoidable attacks, however mistakes happen. It can be very embarrassing and a shock to one's pride to acknowledge their error and report involvement in a potential security breach. Your first instinct may be to curse and yell, but this would be a serious mistake. Keeping calm and collected is the key to the trust needed for employees to come to you right away, while they are feeling their most vulnerable. For this reason, treat every report with appreciation and immediate attentiveness. Whether the alert turns out to be a false alarm or an actual crisis, avoid berating the employee for their mistake no matter how red your face may become. When the situation is under control, take an opportunity to thank them for reporting the situation so that it can be handled appropriately. Remember, it takes a lot of courage to step up when you know you were to blame. Help the employee understand what to look out for next time. •

Kathy Powell kpowell@tienational.com (630) 518-9622 Article Source: https://EzineArticles.com/expert/Kathy_Powell/2436426



Reducing Electrical Exposure During Fire Pump Inspection, Testing and Maintenance NFPA 25 TIA 17-2

by Mark Hopkins P.E., NFSA's Vice President of Engineering



There have been a few changes to the current edition of NFPA 25, Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, 2017 edition, that should be of interest to anyone involved in ITM. On December 6, 2017, TIA 17-2 (initiated as TIA Log# 1287) was released which relates to electrical safety, primarily regarding exposure of individuals to high voltage conditions

with little gain. NFPA 25, 2017 edition, contains requirements that can only be accomplished by an inspector (intended to apply to anyone conducting ITM procedures) accessing the interior of an energized fire pump controller. While in most cases there are no incidents under these circumstances, the few times where an incident does occur can be devasting. TIA 17-2 addresses this safety concern.

NFPA 25, TIA 17-2 (TIA Log# 1287) was proposed by Tracey Bellamy, P.E., CFPS of Telgian Corporation, an NFSA member company, based on a study conducted for The Home Depot. The report "Electric Fire Pump Controller Inspection, Test and Maintenance, Arc Flash Hazard Whitepaper," dated March 27, 2017 was written by Bellamy to summarize the issues. This whitepaper was included as part of the proposal submitted to the NFPA 25 Technical Committee for consideration. The paper provides a detailed account of the hazard and inadequacies of current personal protective equipment (PPE) available for inspectors.

An arc flash is a rapid release of energy resulting from a fault between an energized bus bar, and an electrical pathway allowing transference of this energy, such as a ground, neutral or another bus bar having a different phase. The energy transferred during an arc flash causes a drastic temperature rise, up to 35,000°F, and a rapid volumetric expansion of material resulting in an explosion. According to Bellamy, these events can result in blast pressures exceeding 2,000 psf, pressure wave velocities of 700 mph and sound waves as a high as 160 dB. Exposure to such an event can cause severe injuries or death.

NFPA 25 sections 4.9.6 and 8.3.3.11 currently provide requirements for electrical safety. Section 4.9.6 provides general requirements for safety and section 8.3.3.11 provides requirements specific to fire pump testing. The fact that section 4.9.6 uses the

terminology "legally required precautions" and the annex contains the word "WARNING," in bold capital letters should be sufficient to incite concern. The annex (A.4.9.6) discusses that NFPA 20 includes requirements advising against providing a means for disconnection of the power supply to electric motor-driven fire pumps to ensure reliability. However, the absence of a power disconnect switch results in having energized electrical exposed in the fire pump controller anytime the cabinet door is opened for inspection, maintenance or testing purposes. Thus, exposing inspectors to potential arc flash hazards. The following language was used in section 4.9.6 and annex section A.4.9.6 prior to TIA 17-2 becoming effective.

4.9.6* Electrical Safety. Legally required precautions shall be taken when testing or maintaining electric controllers for motor-driven fire pumps.

A.4.9.6 WARNING: NFPA 20 includes electrical requirements that discourage the installation of a disconnect means in the power supply to electric motor-driven fire pumps. This is intended to ensure the availability of power to the fire pumps.

Where equipment connected to those circuits is serviced or maintained, the service person could be subject to unusual exposure to electrical and other hazards. It could be necessary to establish special safe work practices and to use safeguards or personal protective clothing, or both. See also NFPA 70E for additional safety guidance.

Section 8.3.3.11 simply provides reference back to section 4.9.6 emphasizing the importance of electrical safety and the fact that there are legally required precautions that apply. The annex (A.8.3.3.11) refers to NFPA 70E, *Standard for Electrical Safety in the Workplace*, for additional safety guidance. This is understated since NFPA 70E provides requirements for conducting an incident energy analysis to determine the real potential for harm to inspectors during ITM. The following language was used in section 8.3.3.11 and annex section A. 8.3.3.11 prior to TIA 17-2 becoming effective.

continued on page 13

continued from page 12

8.3.3.11* Safety. Section 4.9 shall be followed for safety requirements while working near electric motor—driven fire pumps.

A.8.3.3.11 See also NFPA 70E for additional safety guidance.

It is also important to recognize that the *OSHA*, *Code of Federal Regulations Title 29* (29 CFR 1910.333(c)) provides additional requirements applicable to conditions involving exposed energized electrical equipment. Individuals must be familiar with the hazard, PPE and special precautionary requirements. Regardless of referencing NFPA 70E as advised in NFPA 25 section A.8.3.3.11, the provisions of 29 CFR would be applicable. These requirements might not be obvious to inspectors.

In most cases, an incident energy analysis is not being conducted to determine the incident energy exposure and evaluation of PPE as was performed by Telgian. It they were the problem of exposing people to hazards beyond the provided protection of commercially available PPE would have been previously cited.

Inspection and maintenance requirements for fire pumps identified in NFPA 25 section 8.1.1.2 along with alternative procedures identified in section A.8.1.1.2 would require personnel to work within energized fire pump controllers exposing them to potential arc flash hazards. TIA 17-2 removes these requirements as part of annual ITM procedures. As an example, the modified language of NFPA 25 section 8.1.1.2.2 is provided. Similar language has been added to the other associated sections of 8.1.1.2 and Table 8.1.1.2 has been modified for consistency with these changes. For clarity, underlined text indicates new language and strikethrough text indicates deleted language as it appears in TIA 17-2.

8.1.1.2.2 Electrical connections shall be checked annually and repaired as necessary to the extent that such work can be completed without opening an energized electric motor–driven fire pump controller.

TIA 17-2 modifies NFPA 25 section 4.9.6 to require the provisions of NFPA 70E. The language previously in in section 4.9.6 has been separated to a title and a new subsection 4.9.6.1. A new subsection has been added to mandate use of NFPA 70E.

4.9.6* Electrical Safety.

4.9.6.1 Legally required precautions shall be taken when testing and maintaining electric controllers for motor-driven fire pumps.

4.9.6.2 At a minimum, the provisions of NFPA 70E shall be applied.

The annex section has been expanded to clarify that PPE requirements will vary based upon specific installation details and associated energy levels.

A.4.9.6 WARNING: NFPA 20 includes electrical requirements that discourage the installation of a disconnect means and limit overcurrent protection in the power supply to electric motor—driven fire pumps. This is intended to ensure the availability of power to the

fire pumps. Where equipment connected to those circuits is serviced or maintained, the service person could be subject to unusual exposure to electrical and other hazards. It could be necessary to establish special safe work practices and to use safeguards or personal protective clothing, or both. The required category of personal protective equipment will vary dependent upon the specific installation details and associated incident energy levels. The determination of such incident energy levels can be established by conducting an incident energy level analysis as provided in Annex D of NFPA 70E or by utilization of the PPE Category Method provided by NFPA 70E, Table 130.7(C)(15)(A)(b), where applicable. Use of the PPE Category Method requires that the maximum available short-circuit current and maximum fault clearing time for the actual installation do not exceed those indicated in NFPA 70E, Table 130.7(C)(15)(A)(b). See NFPA 70E for guidance regarding the determination of the incident energy and the required level of personal protective equipment. The provisions of NFPA 70E require that the owner label the equipment with information regarding the electrical hazards associated with the installation. Where such labeling is not present, the technician cannot make a determination for safe work practice on the equipment without further assessment of the incident energy associated with the installation.

NFPA 25 section 8.3.3.11 has also been modified to require the use of NFPA 70E. The language previously in in section 8.3.3.11 has been separated to a title and a new subsection 8.3.3.11.1. A new subsection has been added to mandate use of NFPA 70E. The text in A.8.3.3.11 has been revised to reference annex A.4.9.6.

8.3.3.11* Safety.

<u>8.3.3.11.1</u> Section 4.9 shall be followed for safety requirements while working near electric motor–driven fire pumps.

8.3.3.11.2 At a minimum, the provisions of NFPA 70E shall be applied.

NFPA 25 section 8.3.3.2.1 requiring calibrated meters for measuring voltage and has been deleted. Section 8.3.3.2.2 has been modified and renumbered along with the associated subsections.

8.3.3.2.1 Voltage and amperage readings on fire pump controllers that meet the following criteria shall be permitted in lieu of calibrated voltage and / or amperage meters:

(1) The fire pump controller shall have been factory calibrated and adjusted to ± 3 percent.

(2) The voltage reading shall be within 5 percent of the rated voltage.

8.3.3.2.1. Except as permitted in 8.3.3.2.1, Calibrated test equipment shall be provided to determine net pump pressures, rate of flow through the pump, volts and ampere, and speed. (previously section 8.3.3.2.2)

NFPA 25 section 8.3.3.7 (2) requires voltage and current readings to be taken at each flow condition during an annual fire pump performance test. NFPA 20 has included a requirement to allow

-

continued from page 13

for electrical measurement to be read from the exterior of the fire pump controller since the 1999 edition, which lessens the potential hazard. The problem is that many existing controllers do not have a means for taking electrical readings from the exterior and require testing personnel to open the fire pump controller cabinet door to take these measurements during the test. TIA 17-2 modifies the language of section 8.3.3.7(2) to reference "where an external means is provided on the controller."

- (2) At each flow condition, the procedure is as follows: (a) Where an external means is provided on the controller, record the electric motor voltage and current (all lines).
 - (b) Record the pump speed in rpm.

Section 8.3.3.9 (3) also requires voltage and current readings to be taken after transference to an alternate power supply under peak load conditions. TIA 17-2 modifies the language of section 8.3.3.9 (3) to delete reference to voltage and amperage readings.

- (3) While the pump is operating at peak load and alternate power, record the following to voltage, amperage, rpm, suction pressure, discharge pressure, and flow rate and include in the pump test results:
 - (a) The voltage where an external means is provided on the controller
 - (b) The amperage where an external means is provided on the controller
 - (c) The rpm
 - (d) Suction pressure
 - (e) Discharge pressure

Evaluation of the fire pump performance in accordance with section 8.3.7.2.3 would allow for identification of conditions where electrical performance evaluation would be warranted.

8.3.7.2.3 The fire pump test results shall be considered acceptable if both of the following conditions are satisfied:

- (1) Fire pump can supply the full system demand as provided by the owner.
- (2)* Fire pump test results are no less than 95 percent of the flow rates and pressures at each point for either a or b:
- (a) Original unadjusted field test curve
- (b) Fire pump nameplate

Under conditions where an electric motor-driven fire pump fails to achieve the performance as identified in Section 8.3.7.2.3, an evaluation of the electrical performance would be warranted by personnel trained in accordance with the requirements of NFPA 70E and OSHA 29 CFR for working in an energized fire pump controller.

TIA 17-2 removes the need to unnecessarily expose inspectors to these imposed hazards by working in an energized fire pump controller thus improving workers safety. Additional changes have been made throughout NFPA 25 to remove requirements exposing inspectors to energized equipment. The TIA is only applicable to the 2017 edition of NFPA 25, however, additional TIA's have been submitted for the 2011 and 2014 editions to account for specific occupancies and jurisdictions that requirement strict adherence to the requirements of these specific editions. As part of the First Draft Meeting, the electrical requirements have been amended for the 2020 edition to be consistent with the changes made as part of TIA 17-2.

A copy of TIA 17-2 can be obtained by visiting the NFPA website at www.nfpa.org. The TIA is found by accessing the Codes and Standards Tab, selecting List of NFPA Codes & Standards and selecting NFPA 25. Alternately, the link can be accessed at www. nfpa.org/25. The TIA is found on the Current & Prior editions tab.

It is also worth noting that Errata 25-17-1 is also available on this webpage which provides corrected references for all tables in NFPA 25, 2017 edition.





Reddi-Pipe[®] arrives at your shop with a durable, red matte finish-we even offer aerosol touch-up paint! And your savings & advantages keep stacking up from there:

- No shipping costs or added lead time associated with powder coating.
- Fully stenciled for full UL/FM and AHJ compliance.
- Parts never leave your shop and you never lose traceability.
- Easy to weld (unlike powder coating).
- · Competitively priced.
- · Protected by our exclusive EddyGuard II antimicrobial coating.

BOTTOM LINE: these Bull Moose sprinkler pipes are Reddi...to save you time and money. Visit **BullMooseTube.com** to learn more.









| COSTOF | CONVENTIONAL SPRINKLER PIPE | | REDO | II-PIPE |
|---|--------------------------------|------|------|----------------|
| MONEY/TIME | \$ | hrs. | \$ | hrs. |
| OUTBOUND SHIPPING FOR POWDER COATING: | s | hrs. | \$0 | O hrs. |
| POWDER COATING: | s | hrs. | \$0 | O hrs. |
| INBOUND Shipping from Powder Coating: | s | hrs. | \$0 | O hrs. |
| RE-STENCILING: | s | hrs. | \$0 | O hrs. |
| LABOR FOR ABOVE: | s | hrs. | \$0 | 0 hrs.* |
| YOUR SAVINGS: | s | hrs. | \$0 | O hrs. |

*Reddi-Pipe may require minor touch-up after fabrication.



2021 IBC & IFC Mid-Cycle Development

by Jeffrey M. Hugo, CBO, NFSA's Director of Codes and Public Fire Protection



NFSA's Codes and Public Fire Protection Department went to the Spring 2018 ICC Code Action Hearings, which is the first step in establishing the contents of the 2021 IBC, IFC, and IRC codes. Over 130 proposals directly impacted fire sprinklers. Below are a few of the proposals going through the process.

Top five changes from NFSA proposals:

- 1. High-rise retrofit (F184-18): This proposal adds language in IFC Chapter 11 that requires existing high-rise buildings over 120 feet to retrofit with fire sprinklers. High-rises less than 120 feet (to 75 feet) have an option to provide a second stairway, a full fire-alarm system, or retrofit with fire sprinklers. Committee action: Approved as submitted.
- 2. Open parking garages (F110-18): This proposal eliminates the blanket exception for fire sprinklers for open parking garages in the IBC and provides two new major thresholds to trigger fire sprinklers: new open parking garages over 55 feet in height or new open parking garages over 48,000 sq.ft. in fire area to have fire sprinklers installed. Committee action: Approved as submitted.
- 3. High-piled storage frequency inspections (F253-18): This proposal adds text to the IFC that requires an annual ninepoint inspection of high-piled storage buildings to maintain the approved storage arrangement and commodities. Changes to the storage occupancy require fire code official approval. Committee action: Approved as submitted.
- 4.IRC P2904 and NFPA 13D correlation (RP5-18 thru **RP9-18:** These proposals update the IRC P2904 fire sprinkler installation to correlate with latest NFPA 13D standard. Freeze protection, ceiling configuration, water meter tables and more were updated for parity between the two documents. Committee action: Approved as submitted, some proposals were modified.
- 5. **Terminology:** Several proposals correlated the term automatic

sprinkler system, as defined in the IBC/IFC, across all ICC codes. This will provide for cleaner interpretation and enforcement of fire sprinkler systems. Committee action: Approved as submitted, some proposals were modified.

Top changes that affect industry:

- 1. Pedestal buildings and NFPA 13R: Several proposals were successful for reducing NFPA 13R back to the original scope of four-stories. This would prohibit a four-story+ residential building protected by NFPA 13R on top of a pedestal or podium style building. Proponents cited several recent fires, such as Edgewater, NJ fire and several others and advocated for increased active fire protection systems in concealed spaces as provided by NFPA 13. Committee action: Approved as submitted, some proposals were modified.
- 2. Construction fire safety: Several proposals were successful for increasing fire safety for construction sites. A daily safety inspection, increased credentials for safety directors and fire watch personnel, site safety plans and other increases were accepted by the fire code committee. All responsibility of construction fire safety goes back to owner to enforce. Committee action: Approved as submitted, some proposals were modified.
- 3. **Tall wood buildings:** Several proposals were accepted to allow tall wood buildings (fire-rated mass timber) to be included as three new construction types: 3-hr rated, 2-hr rated, and unprotected. The 3-hr rated tall wood buildings for residential and business occupancies are proposed for 18 stories and 270 feet in height. High-rise tall wood buildings are fully sprinklered per NFPA 13, with protection extended to the concealed spaces and an increased water supply redundancy for tall wood buildings over 120 feet. Committee action: Approved as submitted, some proposals were modified.
- 4. Combustible exterior wall coverings: Several proposals changed how combustible exterior wall panels such as MCM's (metal composite materials) and other products are tested and installed on buildings. In the current codes, fire sprinklers

continued on page 18



continued from page 16

increase the area of these materials on the exterior wall, but interior fire protection has little effect on exterior wall fire protection, fire spread, occupant egress and firefighter safety. The wall panel industry as well as the fire service advocated to decrease combustibility and restrict fire sprinkler increases. Committee action: Approved as submitted, some proposals were modified.

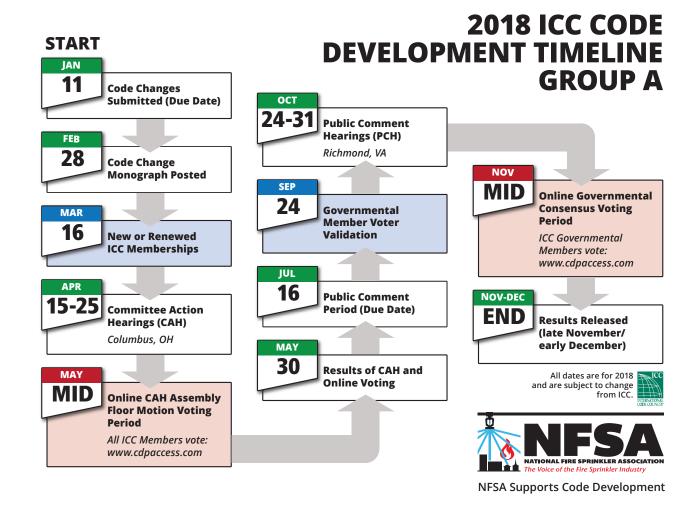
Major fires around the world do not go unnoticed in the ICC code arena. Nearly every major proposal cited above stemmed from a recent fire:

- The Edgewater NJ fire and other similar massive construction related fires reduced the use of NFPA 13R systems on top of pedestal buildings.
- The West Chester nursing home fire was discussed for sprinkler system maintenance and exterior wall fires.
- The California (Napa and Santa Rosa) wildfires for wildland

fire protection.

- The Grenfell and Dubai's Torch Tower fire changed how combustible exterior wall panels such as MCM's are tested and installed.
- The Liverpool Echo Arena car park initiated awareness for fire sprinkler requirements in open parking garages.

The 2021 ICC development process is not over, but the above represents some of the results from the committee action hearings in Columbus, Ohio. During the summer of 2018, public comments are solicited from any interested party and the public comment hearings occur late October in Richmond, Virginia. The final step is ICC governmental membership ratification of all changes via an online voting process that occurs in November of 2018. Publication of the 2021 IFC and IBC will be mid-2020.



NFSA BOOTH MAKES BIG SPLASH AT NFPA EXPO!

Your Association made an impressive showing at the NFPA Expo in June at Mandalay Bay in Las Vegas. The booth was continuously busy with attendees stopping by to learn about #fastestwater or connect with an NFSA staff member to talk about the latest developments in the industry. The #fastestwater prize wheel had them lined up down the aisle, waiting for a turn to spin! While the line gueued up in front of the booth, our every-ready booth staff took advantage of the opportunity to engage attendees in conversations about the latest tax incentives, NFPA voting opportunities, membership and NFSA events. The hard work and dedication of the booth staff ensured that our booth was a continuous hub of activity. Staff in adjoining booths actually took the time to thank them for bringing our prize wheel and attracting so much attention to the area. A special treat for the booth staff was attending a reception hosted by Siemens at the Liberace Mansion. Wayne Newton made a guest appearance and took the time to chat and

be photographed with each attendee. A well-deserved good time was had by the NFSA booth staff!•







NEW MEMBERS

CONTRACTOR

Shawn Guertin

TG Gallagher

Cambridge, Massachusetts

Ricardo Renteria

Renteria Fire Protection, Inc. *Cleveland. Texas*

Ian Alexander

Lund Fire Products *Bayside, New York*

Sean Guillory

Fire PG Summerdale, Alabama

PROFESSIONAL

Eric Tatum Sr.

Arlington Heights. Illinois

Michael Cates

BEA

Idaho Falls, Idaho

Norman Reece

BEA

Idaho Falls, Idaho

Gregory Pfeifer

Escape Fire

Little Canada, Minnesota

Martin Firestein

Firestein & Firestein Van Nuys, California

Daniel Schenbeck

Hawaii Fire Design & Solutions Waipahu, Hawaii

Gerard O'Halloran

Renewable Power Engineering Butler, New Jersey

Jeff Ferguson

Indianapolis, Indiana

Angela Sosnosky

Youngstown, Ohio

Cory Stolworthy

Idaho National Laboratory
Idaho Falls, Idaho

Spence Carter

BEA

Idaho Falls, Idaho

Dustin Stokes

BEA

Idaho Falls, Idaho

David Young

BEA

Idaho Falls, Idaho

SUBSCRIBER

Mike Lisek

Itasca Fire Protection District #1 *Itasca, Illinois*

Sylvia Arvizu

City of Perris

Perris, California

Larry Collins

Eastern Kentucky University Richmond, Kentucky

Ray Pettigrew

King County Fire District #2 Burien, Washington

Bobbi Clauson

Jackson Hole Fire/EMS *Jackson, Wyoming*

Christopher Bixler

Reading Fire Dept., OFM Reading, Pennsylvania

Edward Willigan

Bonland Industries, Inc. *Annandale, New Jersey*

Emily Thomas

University of Maryland Potomac, Maryland

Patrick Farrens

Gladstone Fire EMS Pleasant Valley, Missouri

Kris Rewald

Lake Johanna Fire Department Shoreview, Minnesota

LeviRoline

Eastern Kentucky University Rochester, Minnesota

Vince Guinsler

Grange Insurance Ada. Michigan

Dave Yurczyk

Avon, Minnesota

Karl Petsching

North Scituate Fire Department
North Scituate, Rhode Island

Tony Martins

City of Plantation Fire Dept Plantation, Florida

Adam Heck

Eastern Kentucky University *Richmond, Kentucky*

Jeremy Clancy

Howard County Fire & Rescue *Columbia, Maryland*

Robert Thomas, Jr.

University of California, Davis Health Fire Prevention Sacramento, California

James Reilly

Prince George's County Fire/EMS Department *Landover Hills, Maryland*

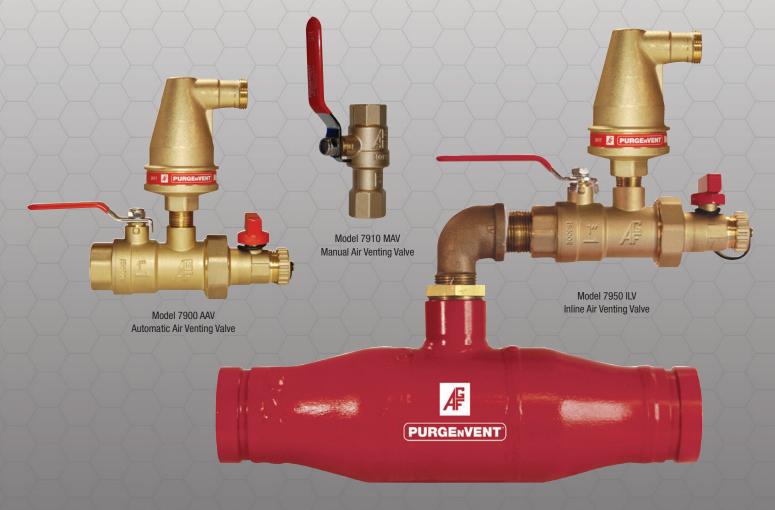
SUPPLIER & MANUFACTURER (SAM) Cecil Bilbo

Academy of Fire Sprinkler Tech Champaign, Illinois

Robledo Aybar

Del Prado Holdings LLC Hollywood, Florida

VENT TO PREVENT CORROS ON SIGNATURA DE LA CORROS DEL CORROS DE LA CORROS DEL CORROS DE LA CORROS DEL CORROS DE LA CORROS DEL CORROS DE LA CORROS DE



PURGENVENT

NFPA 13 code requires the venting of excess air from wet fire sprinkler systems to help prevent corrosion. PURGENVENT Air Venting Valves are designed to purge air from the system while it is being filled and then vent excess air from the system while it is in operation. Help prevent corrosion and exceed code requirements by installing PURGENVENT on all of your wet fire sprinkler systems.

www.purgenvent.com

We hope you'll choose to support our Advocates' Coalition as we work to create Fire Safe Homes

Working together, we can create resources to educate those who make the decisions regarding community fire protection.

Our goal is to be a go-to resource for community leaders who need a firstperson account of the devastating impact fire can have on a community and a family. We can prevent future tragedies, and we believe that our stories help everyone understand in a way that makes a difference. Visit our website for additional resources and information. Order our Media Kit for a complete package of PSAs, media information, talking points, statistics and actual examples of resources used in communities. Your support is greatly appreciated, and as a non-profit 501(c)3 we are now ready to grow our mission and expand our efforts. We hope you'll support our team as an Advocate, Supporter or Corporate member (details on reverse side, along with form).



CommonVoices1

fireadvocates.org

Fire Sprinklers Save Lives



An Advocate's Coalition Determined to Create a Fire Safe America

Did you see us on Fox & Friends and Good Moring America?











The Power of Positive



by Vickie Pritchett, Director of Outreach & Government Relations

on Gordon challenged the record crowd at our NFSA Annual Seminar and Business & Leadership Conference to be positive and to be engaged in setting the culture within our respective companies and NFSA. I had the privilege of working with Jon prior to the event so that he would have a better idea of who we are as an association and also who our members are and the noble work they do. Simply stated, he got it. He intertwined his respect for our business of life-safety into his words of wisdom, which he shares with Fortune 500 companies and beyond. He inspired us to not just know our mission, but to be on a mission.

Oh, how I loved his challenges. It put into perspective many of the respective initiatives, projects and outreach events NFSA is involved with. Passion? You bet we have it! Belief in who we are and what we do? Yes!

Jon utilized his examples of successful teams to make points that are relevant to our work. Sports analogies, as well as family stories, brought to life a roadmap that can be followed that will engage the team, motivate the world and make a difference like no other. When you examine your energy, are you an energy giver or an energy vampire? Do you use your energy to motivate others, understanding that you can be the spark plug that promotes positive change and culture?

Jon shared specific examples that resonated with me and I've actually used many of his examples in real work since the conference. As leaders, we must help our team see the obstacles/challenges in the right perspective. We must embrace change, thrive on change, and know that we become stronger as we work through it as a team. Transfer of belief is something that happens when leaders

embrace their daily work and share their insights with the team. As I reflect on NFSA, I realize we are doing this and it makes me proud to be a member of the team! President Ray utilizes many of the insights Jon Gordon shared as he leads our association, and we are all stronger for it.

Jon talked about the importance of relationships. I wanted to jump up and say, "we do that well... our work, our association, this event... it's all about relationships!" I didn't jump up, but I did make a note and I believe that with every ounce of my heart. I also loved the analogy of the three C's... Communication, Connection and Caring. We must put more care into everything we do. Connected teams become committed teams, and leaders help the team become more connected. This is a defining moment! Thank you Jon Gordon, we related to the stories you shared!

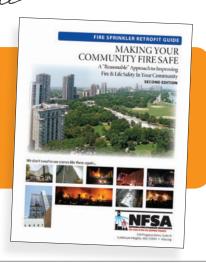
Jon closed by challenging us to pursue greatness and growth! He encouraged us to "love tough" as we work to share with the world the life-saving technology that is the heart of our industry.

My response to this challenge is this, we are all in! As an association team, we pledge to you, our members, that we will give our all on a daily basis to see our mission become reality. "To protect lives and property from fire through the widespread acceptance of the fire sprinkler concept." To sum it up, it doesn't get any better than this! We are all the luckiest people in the world to have work that matters. #fastestwater

Until next time, Stay Safe,

Check out NFSA's Fire Sprinkler Retrofit Guide at

http://bit.ly/NFSAretrofit





NFSA Applauds National Fire Protection Association and Home Fire Sprinkler Coalition for National Home Fire Sprinkler Day

The National Fire Sprinkler Association applauds the North America-wide campaign that occurred on May 19th. The event was initiated by the National Fire Protection Association (NFPA) and the Home Fire Sprinkler Coalition (HFSC), to raise awareness of the growing dangers of home fires and the life-saving benefits of installing fire sprinklers in new homes. Communities in more than 30 states committed to hosting events on the same day.

"The purpose was to organize a unified "day of action" on May 19th, with a focus on the tough problem of home fires and the equally tough protection of home fire sprinkler technology," says Lorraine Carli, Vice President at NFPA and President of HFSC. "By joining forces coast to coast, communities are debunking persistent myths, helping consumers learn the facts

FIRE SPRINKLER PROTECTED WITHOUT FIRE SPRINKLERS

before they build or buy a new home, and urging their local officials to support sprinkler codes."

"NFPA's leadership and HFSC's educational material is making a difference in saving lives and property through the 'Built for Life' Fire Departments. I hope this day creates more of them," explained Shane Ray, NFSA President. "We are proud to join forces and support the events across the country, with most of our fire sprinkler demonstration trailers in service for the event, demonstrating how fast fire is, and also how quickly fire sprinklers activate and control the fire."

Many people lose sight of the fact that home fires are dangerous not just to residents but also to firefighters. Today's new houses are built with lightweight construction and big open designs and are filled with synthetic furnishings. When they burn, they fail fast, and that environment places firefighters at risk from fire, as well as toxins that lead to disease.

Home Fire Sprinkler Day is an opportunity for everyone to learn about new-home dangers, get the facts about lifesaving sprinkler technology and make progress against the home fire problem.



NFSM

Growing Pains – The Challenge of Fire Protection Design in a Changing Environment

by April M. Musser, PE, CFPS, Regional Practice Leader - Fire Protection Engineering, Telgian Engineering & Consulting

uilding owners typically believe if they comply with the minimum prescriptive fire and building code requirements, they are providing adequate fire protection. However, the building and construction industry is constantly changing. Today's modern construction incorporates open floor plans, collaborative offices and efforts to use natural light. These practices reduce compartmentation and, in turn, offer opportunities for a single fire event to impact large areas and endanger more occupants.

As architectural technologies and trends advance, building geometry, structure, materials and fuel loads change with them. Not only must fire protection engineers protect commodities and fuel packages with different burning characteristics, they must also protect the changing environment that house these commodities.

The prescriptive code criteria for designing fire sprinkler systems which is still used today was originally developed in the 1970s. The last major overhaul of the sprinkler design density curves in NFPA 13, Standard for the Installation of Sprinkler Systems, occurred in 1991 – nearly three decades ago. The research and testing that went into the development of NFPA 13 was based on real-world performance, fire testing and engineering analyses that helped ensure its continued efficacy for protection in most scenarios. However, recent changes in the built environment and the potential impact of new trends introduces opportunity for these prescriptive code approaches to fall short of their intended level of protection.

New Design and Building Challenges

One of the most obvious changes since the last overhaul of the sprinkler density curves is fuel load hazard, the amount of energy a fire can produce per unit area of material. There has been significant increase in the use of flammable synthetic materials in furnishings and consumer products. These materials have been noted to contribute to faster fire growth in homes, yet they continue to be used to furnish commercial office buildings, restaurants, hotels and other occupancies. Synthetic materials tend to produce hotter, faster-growing fires that have products of combustion more hazardous than natural alternatives such as cotton, wood and paper.

New technologies have also given rise to changes in building materials. Lightweight structural components can affect burning characteristics when impregnated with synthetic materials or laminated with glues or urethanes. These materials can weaken rapidly when exposed to heat or firefighting water and result in risks associated with flammability and structural integrity. While most of these issues are primarily associated with residential construction, it would be naive to presume such advances aren't touching the commercial built environment.

Methods of creating architectural features can also add fire risk. Some foam products, which often provide soundproofing or are used to create architectural features, have strict installation requirements to ensure performance within the mandated code limits, but misapplication of materials or installation errors can introduce significant fire growth risk.

The rise of LEED certifications and the drive to provide more natural lighting is also changing building geometry and impacting fire risk. Atriums are growing in popularity due to the natural light and reduced energy costs they provide. In some cases, these spaces can make sprinkler protection more challenging as stratification and smoke cooling may delay or prevent sprinkler activation, rendering large portions of the facility fire protection ineffective.

Collaborative office spaces also contribute to decreased compartmentation and increased fire risk. These open areas create larger building compartments and, as a result, a single fire can impact a much higher percentage of the occupant population.

Incorporating Performance-Based Design

Further changes in design and architectural trends are inevitable and safety professionals have already had to make adjustments to decade's old protocols to adapt to the changing built environment. While the original NFPA 13 design curves and subsequent updates are critical to consider when designing fire sprinkler solutions, they are not foolproof – there are still gaps in NFPA 13 protection criteria and scenarios for which no prescriptive sprinkler protection criteria exists. A fire protection design professional may need to think more objectively before blindly applying prescriptive sprinkler criteria.

How does a fire protection professional account for these variables in designing fire protection systems? NFPA 13 offers a codecompliant methodology of developing design criteria based on each occupancy's specific challenges under Section 1.5, Equivalency. This section allows for the application of performance-based

continued on page 26

continued from page 25

design options. However, where alternative means of providing protection are utilized under section 1.5, there is a requirement to provide documentation supporting those equivalent methods. In addition, the approach requires approval by the authority having jurisdiction. NFPA 13, section 1.5 states:

1.5 Equivalency. Nothing in this standard is intended to pre-vent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by this standard.

1.5.1 Technical documentation shall be submitted to the authority having jurisdiction to demonstrate equivalency.

1.5.2 The system, method, or device shall be approved for the intended purpose by the authority having jurisdiction.

In cases where the fuel load may present a degree of uncertainty, there is an option to perform fire testing. Bench-scale fire testing is an excellent means to determine the fire and burning characteristics of a fuel package in a cost-effective manner. The data from benchscale testing, such as from the Cone Calorimeter and the Lateral Ignition Flame-spread Test (LIFT), can be utilized in computer fire modeling software to identify anticipated fire size and growth rates. This information can be utilized to justify a protection scheme based on the research and testing that is available for fuels with similar heat release and fire growth rates.

At times, full scale fire testing may be warranted. The costs associated with full scale fire testing can be prohibitive, but building owners with high risk aversion may be motivated to consider this to ensure faster fire control or suppression.

One of the most powerful tools in a performance-based design is the use of fire modeling. A fire model cannot evaluate the effect of different sprinkler densities on a fire, but it can provide valuable insight on fire growth rate and tenability that may assist in determining if the prescribed sprinkler density is reasonable to control the fire. This tool is especially beneficial for evaluating how changes in building geometry contribute to fire growth and size at the time of sprinkler activation, which can allow fire protection professionals to assess whether the prescriptive criteria in NFPA 13 for sprinkler density is reasonable.

Fire modeling can also be used to limit the number of full scale or large-scale fire tests needed for a given scenario. Sensitivity analysis can be used to focus on key variables allowing for a cost effective means to validate fire modeling results proving the concept of a performance based design.

Fortunately, in most cases NFPA 13 design criteria is adequate, but as responsible fire protection professionals we must never take this for granted. Continued research as building trends change will help reinforce our understanding of fire behavior and allow us to reasonably compensate for adjustments in the built environment. In cases where there is cause for concern or doubt, taking the necessary steps to design code-compliant sprinkler protection using performance-based design options isn't just convenient – it can be life-saving.

April Musser, PE, CFPS is regional practice leader – fire protection engineering for Telgian Engineering & Consulting, a wholly-owned subsidiary of Telgian Holdings, Inc., which provides professional services related to fire protection, life safety, security, risk analysis, environmental health and safety, emergency management/operations continuity and related sustainability (LEED) strategies.





NFSM FEATURE

NFPA 13 2019 Edition: A Major Revamp of the Standard that Started it All

by Russell B. Leavitt Executive Chairman, Telgian

FPA 13, The Standard for the Installation of Sprinkler Systems, was the first standard published in 1896 by what was to become the National Fire Protection Association (NFPA). Since then, there have been more than 60 editions of the standard. Most revised editions contain changes driven by new technology, lessons learned from system performance, advances in architectural and construction methods, and changes to fire hazards. However, about every 20 years or so, the layout of the standard has been revised. The last major revisions to the standard's layout and organization occurred with the 1999 and 2002 editions.

Why Revise NFPA 13 Now?

During the revision cycle for the 2016 edition, the Technical Committee for Sprinkler System Discharge Criteria organized a task group to examine redundancies and technological gaps previously identified in the storage chapters of the standard. The inclusion of storage standards in the 1999 edition of NFPA 13 appeared to have created these problems. As the task group continued its research, it became evident the issue was much larger than first thought.

Problems with redundancy and technological limitations were brought to the Automatic Sprinkler Correlating Committee for direction during the November 2014 meeting. This prompted an expanded discussion regarding other concerns such as the organization of Chapter 8, which deals with installation requirements. As a result, the correlating committee formed a task group to create a proposal for reformatting the standard. The revised standard was to address storage redundancies and technology gaps, the lack of a sequential logic, the scattering of requirements throughout the document, and the overall organization of Chapter 8, which is often referred to as the "catch-all bucket."

The Revision Process

The task group included major stakeholder representatives from organizations that regularly deal with sprinkler system installations. The group met numerous times during the winter and spring of 2015, and their proposed standard revision was approved by the correlating committee at a special meeting on June 26, 2015.

The entire reformatted layout was submitted as a Public Input in the 2019 revision cycle. This created a challenge for the Technical Committees and for NFPA staff since other Public Inputs were based on the 2016 edition of the standard. This created the issue of incorporating revisions that were accepted by the technical committees along with the proposed new organization. With the help and support of NFPA leaders, the first draft report of NFPA 13 included all accepted revisions, including the proposed reorganization of the standard.

In addition to their technical work, the correlating committee and task group recognized the need for publicizing the proposed reorganization as broadly as possible. For the project to be successful, it needed feedback from those who use and enforce the standard. The group targeted specific stakeholders including the enforcement community and property insurers. Task group members and NFPA staff spoke at professional conferences, trade shows and other industry gatherings to spread the word about the project and garner additional support. Committee and task group members worked with the technical arms of NFPA, National Fire Sprinkler Association (NFSA), American Fire Sprinkler Association (AFSA) and Society for Fire Protection Engineers (SFPE) to gather feedback and lead to industry-wide understanding and acceptance of the project.

The final step in the process was the processing of several hundred public inputs and comments by the NFPA 13 Technical Committees. Task groups were formed from committee members and other interested parties to examine the proposed reformat, along with the public input and comments. The enormity of the undertaking by the technical committees, particularly for the Installation and Discharge Criteria committees, cannot be overstated. Working together with the NFPA liaisons, the committees were able to produce deliverables that met the public test.

A New Look for NFPA 13

The 2019 edition of NFPA 13 looks very different from the current documentation. The user will find an expanded Chapter 4, General Requirements, which includes requirements for system size and hazard classification. Water supplies move from the back of the standard to Chapter 5 with Underground Requirements immediately following in Chapter 6. System Components (current Chapter 6) moves to Chapter 7, while System Requirements find a new home in Chapter 8.

The current Chapter 8 is split into multiple sections for ease

continued on page 28



continued from page 27

of use. The new Chapter 9 will provide the requirements for sprinkler location, while installation requirements for each type of sprinkler will have its own chapter. The new Chapter 16 will address system piping, valves and appurtenances. The requirements currently found in Chapter 9 for hanging and bracing are split into two chapters, one for hanging and one for bracing. In the new revised version, Design Approaches finds a new home in Chapter 19. Finally, all requirements for revising existing systems are incorporated into a single chapter.

The reorganization of storage protection criteria was the single largest challenge faced during the reorganization process. In previous editions, storage protection was largely organized by commodity and storage arrangement. Instead, the 2019 edition organizes storage by type of sprinkler. There are separate chapters for Control Mode Density/Area (CMDA), Control Mode Specific Application (CMSA) and Early Suppression Fact Response (ESFR) protection criteria. These chapters contain the requirements for using various types of sprinklers for all commodity and storage arrangements. In addition, all requirements for using in-rack sprinklers are included in a single chapter

The new revision of NFPA 13 will be released after the Standards Council meeting in August 2018. Along with the chapter changes, users can expect the new format to be more intuitive in its layout and easier for non-experts to use. And of course, to the original intent of the effort, many of the prior redundancies have now been fixed. Still, the work is not done. The focus of subsequent editions will be to continue identifying and eliminating redundancies, filling technological gaps and making the document as user-friendly as possible.

Russell B. Leavitt is executive chairman at Telgian, a worldwide provider of comprehensive fire, security, life safety consulting and engineering/design services.



2019

Omni Downtown

Nashville, TN / May 15-18

2020

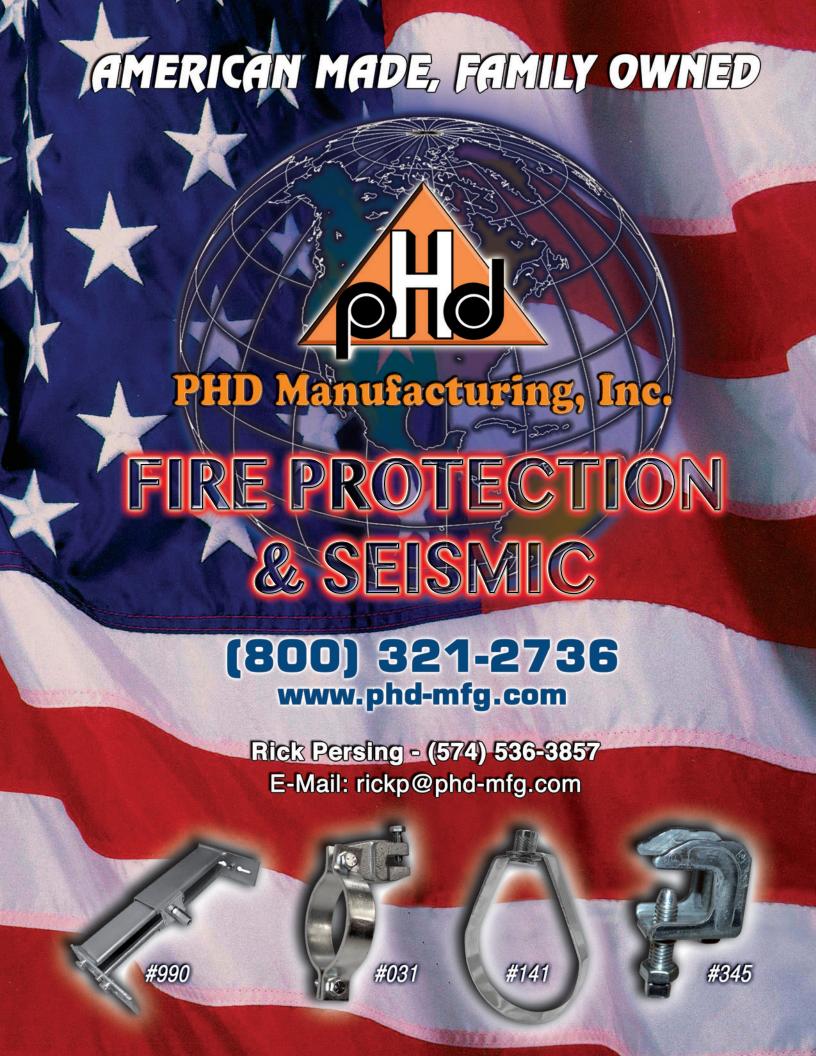
JW Marriott Desert Ridge

Phoenix, AZ/April 29-May 3

2021

Cosmopolitan

Las Vegas, NV/May 12-15



THE ORIGINATOR OF THE ONE-BOLT INSTALLATION-READY COUPLING

NOW COMPLETING THE PLAN WITH LARGER SIZES

INNOVATORS.

From the time Victaulic invented the grooved concept in 1919, we've been leading the industry in efficiency, confidence and value. We kept the same great qualities we're known for – pre-assembled, no loose parts, and no torque requirements. Then improved the design with:

- Added confidence of single pad to pad visual confirmation
- Still no torque requirement
- Up to 6 times faster to install than traditional couplings
- Easy fit-up overhead with a two-piece housing
- One-bolt design eliminates alternating during tightening



FireLock[™] Style 109 Coupling

- Sizes from 11/4-4"
- Pressures up to 365 psi
- Available painted or galvanized



Visit victaulic.com/style109 to watch it in action

NFSM FEATURE

Born in Fire: Scottsdale's Revolutionary Fire Sprinkler Ordinance Continues to Save Lives

(Editor's Note: The following is part of a mini-documentary that was composed by the City of Scottsdale Public Affairs and City Cable Departments as part of a series to highlight the significant events that helped shape the City of Scottsdale.)

merica was ablaze in the early 1970s and it had nothing to do with the politics of Watergate or the Vietnam War.

America was literally burning – commercial and residential fires were epidemic, costing up to 8,000 lives annually and millions of dollars in property damage. A special presidential commission confronted the crisis in 1973. It issued a report called "America Burning" which called for new strategies to both prevent and fight fires.

One of the anxious readers of that study was Jim Ford, fresh out of Paradise Valley High School and a part-time firefighter for the Rural/Metro Fire Department. The report would not only influence his career, it would place him on the forefront of a revolution.

It began in 1975. Scottsdale was booming, congested and emerging as an urban jobs center. The City Council passed an ordinance requiring fire suppression sprinklers in buildings over 7,500 square feet or with heights above three stories.

"Scottsdale's policy makers understood that if you were building large structures in this community then you were adding risk to the community," Ford said. "Sprinklers were a way to reduce that risk and protect our community investment."

An Audacious Plan

The track record for automatic sprinklers was impressive, based on Rural/Metro's local experience and reports from the National Fire Protection Association. Backed by that data, Rural/Metro Fire Chief Lou Witzeman took an audacious step in 1982. He worked with an assortment of federal agencies and insurance companies to convince Womack Homes to put sprinklers in two residential models that were going up in Scottsdale.

Witzman's plan was to set fire to those sprinklered model homes. Ford, who had become a fulltime fire captain, was manning the hoses that day.

"Lou pulled me aside and said 'Jim, your job is make sure those fires go out," recalled Ford. "'If those sprinklers don't work I have to buy those houses ... so you guys better be good today."

The sprinklers worked perfectly. Witzeman kept his money. And the smoke bellowing from the extinguished model homes that day signaled the next phase of revolution.

Data again pointed the way. Four out of five people dying in fires were in residential properties. Residential fires also represented about 70 percent of total property loss in the U.S.

"As an industry, the U.S. fire service wasn't doing enough to solve the residential fire problem," said Ford. "Nor was it addressing the most effective way to reduce firefighter injuries and deaths. We needed to look at all of that."

The City Council put together a committee that included Rural/Metro chiefs Bob Edwards and Frank Hodges, the city's building and water departments, local developers and insurance companies. Their charge was to find a practical way to sprinkler residential homes.

"There is a lot of talk today about coalitions and whether they work or not," said Ford. "Well, it worked back then. People were more willing to sit down and argue and talk and come back with a better method – and they did."

To offset higher building costs, the committee proposed easing some design requirements for developers. The proposals included increasing the space between hydrants, reducing the size of subdivision water mains and shrinking the width of some streets.

Scottsdale Leads the Way

After more than three years of meetings, debate and compromises, the City Council approved a proposal in 1985 that made Scottsdale the first city in the U.S. with a mandatory residential sprinkler ordinance for new structures.

The move drew national headlines and heated commentary. The National Fire Protection Association hailed it as a "watershed event in fire prevention." Most developers, however, detested the move. They felt it added cost to their projects and placed Scottsdale at a competitive disadvantage over other communities.

Detractors persisted, calling the ordinance costly and overly bureaucratic. Developers lobbied the City Council and Legislature to overturn it. There was annual debate over whether residential sprinklers were needed or effective.

"We were so far out on a limb that people were bailing out," said Ford. 'Fire chiefs who were trying to do the right thing were going to their councils and just getting killed by innuendo and misinformation."

Were residential sprinklers a wise investment or an overhyped boondoggle? Scottsdale had to find the answer.

Ford would again play a pivotal role in the debate. Fourteen years after the model home demonstration and a decade after the

continued on page 33



The hardest part of the install is deciding where to go for lunch.

Potter's IntelliGen™ Nitrogen Generators provide easy, quick installation with an intelligent automated setup.

The Potter IntelliGen™ series uses an automated setup procedure that switches the generator into the correct fill mode automatically—that means no more messing with ball valves! This makes installation easy and ensures that your fire sprinkler system has the best possible corrosion protection. Additionally, this web-enabled nitrogen generator allows you to receive status notifications via email and view system details through a web browser or mobile device. Find out how the simplest installation on the market will save you time for other important things, like lunch!

Learn More:

www.PotterIntelliGen.com/install





continued from page 31

Scottsdale ordinance adoption, he was tasked to compile a report to lay out the facts.

Personally, Ford didn't need a study to know the value of residential sprinklers.

"I'd been on the trucks. I'd been on the calls," he said. "I knew the difference residential sprinklers and built-in fire protection was making in our community"

He recounted one incident in a sprinklered home where a sleeping man was doused with gasoline and lit on fire by a roommate.

"That's a fatality anywhere else in the country except Scottsdale," Ford said. "The sprinkler system put him out and saved his life. He didn't even spend the night in an emergency room."

In the first 10 years of data analyzed by Ford, no death was reported by fire in a sprinklered building. At least 13 people were saved by sprinklers in the first 15 years of the ordinance who otherwise would have died in fires. During that same timeframe, 13 people did die in Scottsdale fires -- all were in non-sprinkled residential properties.

Property savings were also significant. The average fire loss per sprinklered building was \$2,166. The average fire loss per non-sprinklered incident was \$45,019.

Since the ordinance adoption, Scottsdale's total fire loss has been consistently about one-third of other comparable communities.

Ford's study was published by the National Fire Protection Association, the Home Fire Sprinkler Coalition and other professional groups. It validated the risk Scottsdale leaders took in 1985 by passing the sprinkler ordinance.

The bottom-line findings were impossible to argue – lives spared, millions in property damage saved and substantially less infrastructure cost to Scottsdale taxpayers.

Ford, already a passionate advocate of residential sprinklers, became an international spokesperson for the city's approach to community risk reduction. He would travel to symposiums throughout North America, Europe and other locations spreading the "Scottsdale Way" of fire prevention.

"We are a big city and we get looked at and studied all the time," said Ford, who today is Scottsdale's deputy fire chief and fire marshal. "People come to look at us and they look at what we do and what we don't do and I'm able to say without a doubt that (residential sprinklers) make a huge difference in how our community is protected."

The impact continues today

From banning billboards to building the Indian Bend Wash Greenbelt, Scottsdale has a long history of innovation. Its early embrace of fire sprinklers, however, may be one of its most significant achievements.

After all, how do you place a value on the dozens of lives that have been saved by sprinklers in Scottsdale?

Just ask Geraldine Griffiths, manager of a Scottsdale residential care home that experienced an electrical fire in March 2018. Eight residents, several wheel-chair bound, were in the home. Sprinklers controlled the blaze before firefighters arrived to extinguish it and help with evacuations.



"In my opinion, with the fuel load in that house we would have definitely lost almost the entire structure and most likely would have had fire fatalities ... if it was not for that sprinkler system" Ford said.

As it was, Griffiths said many of the residents weren't even aware of the fire as they were being evacuated. And because of the limited damage, residents were back home after only three days.

"I want to thank all the people who pushed this project to have fire sprinklers in the house," said Griffiths. "I just couldn't image without the sprinklers what would have happened in this care home."

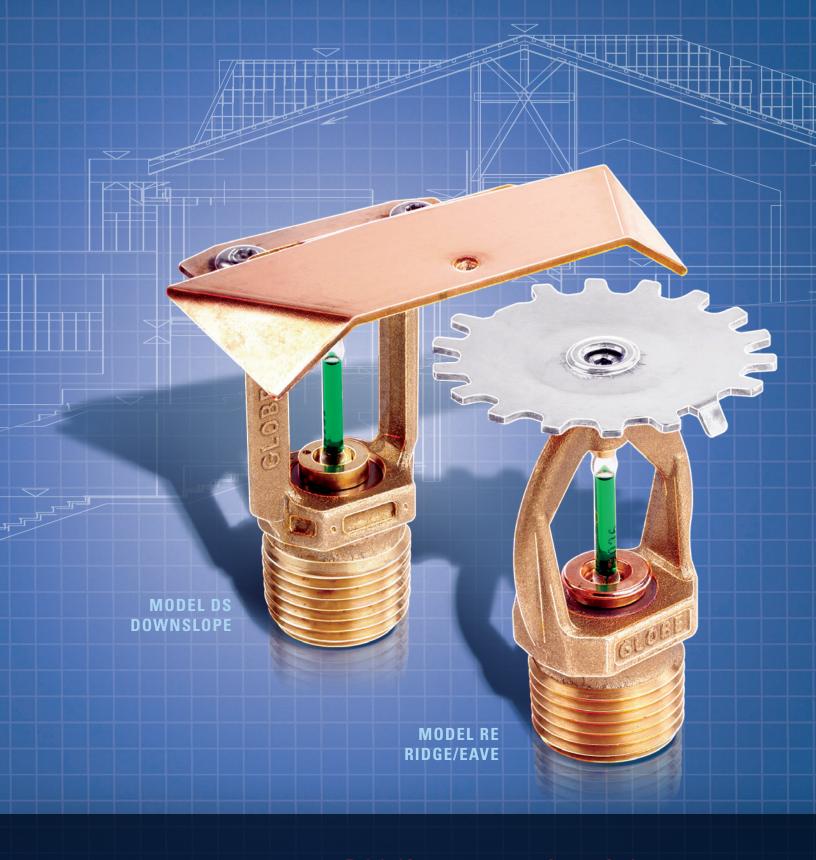
Yet, attempts to roll back residential sprinkler requirements continue. A bill forbidding cities from enacting such ordinances was defeated in the current Legislative session.

Scottsdale's elected officials have continued to hold steadfast, refusing to reduce or remove the requirement for residential sprinklers in new structures.

"One of the great characteristics of this community is its ability to look ahead and to do the right thing instead of just the easy thing," said Scottsdale Mayor Jim Lane. "Our residential fire sprinkler ordinance is an example of that. We stayed focused on the facts and the facts say this system works. It saves lives and property. That's a blessing for this community and a testament to Scottsdale's ability to lead." •

Submitted by Jim Ford, Deputy Chief, City of Scottsdale Fire Department

-



globesprinkler.com

Technical Support +1 989-414-2600

techservice@globesprinkler.com

Customer Service +1 989-846-4583

domesticsales@globesprinkler.com

SEUP TO ITO OO SEUP TO OO SEUP TO ITO OO SEUP TO PROTECT YOUR ATTIC!

Attic system demands can drive the size of system risers, underground, and feed mains for an entire project — which also drives up project cost.

Globe's revolutionary new attic system design provides a wet or dry attic sprinkler system that can substantially reduce your system demand — and lower the total installed project cost. Less water, smaller pipe diameter, smaller dry valves, **potential pump savings** — which all add up to savings for you.

| System Type | TRADITIONAL Per NFPA 13 (standard spray sprinklers) | BACK TO BACK Specific Application Attic Sprinklers | GLOBE'S NEW Specific Application DS/RE |
|-------------|---|--|---|
| Dry System | 300 gpm – 500+ gpm | 340 gpm — 400 gpm | 120 – 140+ gpm |
| Wet System | 150 gpm – 250 gpm | 250 gpm – 300 gpm | 100 – 120+ gpm |

Anticipated system demands consider non-maximum sprinkler spacing due to construction and estimated over-discharge of piping system.

MULTIPLE PATENTS PENDING





PEX for residential fire protection

Installing a residential fire protection system is simple with Reliable Automatic Sprinkler Co. and Viega's PEX Fire Protection Systems, a reliable and integrated system that reduces call backs and increases confidence on the job.

Viega PEX Fire Protection Systems products include ViegaPEX™ Ultra tubing, which is strong and flexible, allowing it to easily bend around obstacles, reducing the number of fittings in a direct sprinkler-to-sprinkler connection. Viega PEX Press, the first and only press fitting on the market is factory-assembled, UL-listed and eliminates the need for solvents or cement. PEX Press can be pressure-tested immediately and Smart Connect® technology helps you to easily identify unpressed connections so that you'll have the peace of mind that the job was done right the first time. Save time, money, and lives with Viega Fire Protection Systems and Reliable Automatic Sprinkler Company. Viega. Connected in quality.



For more information, call 800-976-9819 or visit viega.us

Harbor Beach provides beautiful backdrop for **Record Setting NFSA Annual Seminar and Business & Leadership Conference**

e set some records the week of May 2-5, 2018 at our annual gathering in Fort Lauderdale, Florida. This year was a non-Expo year, but tabletops were available and proved to be a big hit for attendees and the companies who the beach! showcased their products. Over 400 attendees enjoyed the extra time to network with vendors, speakers, NFSA staff, and colleagues

The week kicked off with technical and business sessions on Wednesday, May 2, 2018.

from across the nation.

The opening reception on Wednesday evening provided an opportunity to honor Jay Livingston, as he and his family were not able to attend the Awards Banguet Friday night.

Thursday's opening general session brought internationally acclaimed author and speaker, Jon Gordon to the stage. He provided an energetic kick-off that was filled with advice for leaders seeking the next level, and ways to grow their business and provide the best care of customers and employees along the way. He was a real crowd pleaser, with time at the end of his presentation for audience questions.

Thursday afternoon saw the return of an attendee favorite-NFSA's Volleyball Tournament! Organized by NFSA's Dave Kurasz, the event saw intense competition and fun on the private North Beach, which featured the NFSA logo painted in the sand! The winning team was Wayne Automatic Fire Sprinklers, and they were proud of the custom volleyball that will now be theirs to display at their headquarters in Ocoee, Florida. Their name will also be

engraved on the plague at NFSA headquarters. It was fun to see this event return to the line-up, as much networking occurred thanks to the Future Leadership Committee's hosted "Tiki Bar" on

Friday's General Sessions provided time for an update from Vickie Pritchett, Director of Outreach & Government Relations; an Economic update from a JP Morgan representative; and a Technical Update from NFSA's Vice President of Engineering, Mark Hopkins. The second segment of the morning was closed out with NFSA President Shane Ray and a swearing in of NFSA Board Officers Kent Mezaros as Chair, Jim Boulanger as Vice Chair and Bruce LaRue as Treasurer.

President Ray provided an overview of NFSA activities and ways the Association is involved at the local, state, and national level. He shared goals reached and a vision for the future in a way that provided a great answer to the challenges set forth by Jon Gordon on Thursday.

Friday afternoon was open, unless you were a Contractor, and the Contractor's Forum was well attended and provided time for contractors to network together as a group.

Friday night's Awards Banquet closed out the week on a high note, and was a night filled with respect, honor and appreciation for all of the recipients.

Thanks you to the sponsors of this great event. We couldn't do what we do without you!.



NFSA Salutes 2018 **Award Recipients**

The Awards Banquet on Friday, May 5, 2018, a highlight of our 2018 Annual Seminar and Business & Leadership Conference, provided the opportunity to recognize many of our industry's greats.

"Our fire sprinkler industry is blessed to have many strong members who have led the way over the years," shared Shane Ray, NFSA President. "Our goal is to recognize those who have served and recognize their many contributions to our industry and to saving lives. We did just that with this years' awards, and we are so grateful for everyone that was recognized."

John (Jay) C. Livingston, a fire sprinkler contractor and member of NFSA for over 30 years, was selected to receive the Golden Sprinkler Award. Jay is owner and founder of Livingston Fire Protection, Inc. (LFP). LFP is over 53 years young. An amazing achievement in any industry. Mr. Livingston has positively contributed so much during this tenure, and continues to do so today. Mr. Livingston was traveling on our banquet night with his family, so we presented the award on Wednesday evening at the Opening Reception. This proved to be a crowd pleaser as all enjoyed the Oceanview Terrace and celebrating Jay's Golden Sprinkler Award.

The Russell P. Fleming Technical Service Award was presented to George Stanley of Wiginton Fire Systems. George is Vice-Chair of NFSA's E&S Committee and has worked at Wiginton Fire Systems since 1973. Underspoken, yet focused on technical solutions on behalf of fire sprinklers, and NFSA, George was surrounded by many colleagues from Wiginton Fire























Systems when he received his award, which was presented by Terry Victor, the 2017 recipient.

The Leadership in Public Safety Award is the NFSA's highest award to a fire official or advocate and was presented to Charles Hood, San Antonio Fire Chief. Hood was instrumental in efforts to retrofit residential high rise buildings in San Antonio following the tragic Wedgwood fire in 2014. Due to a Metro Chiefs meeting in his city, he was unable to attend the banquet, but Vickie Pritchett showed a video that highlighted Chief Hood's success on behalf of fire sprinklers and accepted on his behalf.

The induction of 2018 Hall of Fame members was a highlight of the evening. Hall of Fame inductees have contributed nearly all their working lives and beyond to improving the fire sprinkler industry and it was great to pay tribute to the following Class of 2018:

> **RICH ACKLEY NEIL CAHILL FRANK FEE III JOHN JOYCE GEORGE LAVERICK ART O'NEIL CARY NICOL**

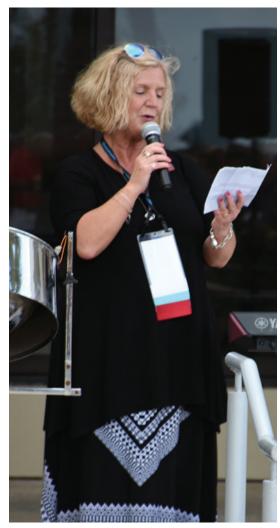
Rich Ackley, Neil Cahill, Frank Fee III, George Laverick and Art O'Neil were present to accept their respective awards and provided comments about what NFSA and the fire sprinkler industry had meant to them. John Joyce and Cary Nicol each passed away in recent months. Jane Nicol, surrounded by children, Christina, Scott, and Jeremy provided an amazing tribute to Cary and the audience responded with a standing ovation.•



Opening Reception























































Spouses Event





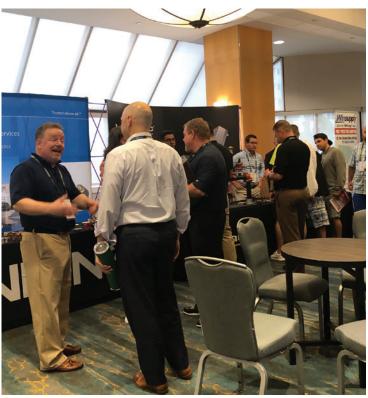




Tabletop Displays Make Inaugural Debut

A first for our Annual Seminar and Business & Leadership Conference, our vendor tabletop displays were a hit with attendees and vendors alike! Showcasing the best and newest innovations of the fire sprinkler industry, the tabletop displays were a hub of activity during breakfast and session breaks throughout the event. We look forward to making this initiative a tradition at future events!







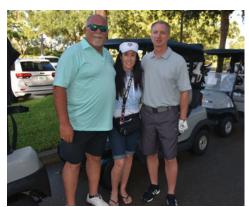


3rd Annual Common Voices Golf Classic

Saturday's exclamation point for the fun-filled week, was the 3rd Annual Common Voices Golf Classic. This event also broke records in 2018, thanks to #CarysChallenge. Cary Nicol, longtime supporter of Common Voices passed away on April 19, 2018. Prior to his passing, he had issued his normal challenge to all of his friends and colleagues...for them to make a donation to the Advocates' Coalition and support the Golf Classic. This year, that challenge expanded following his passing, as his family requested donations be made to Common Voices in lieu of flowers. The golf course was covered in tee signs with messages to Cary's family - over 80 signs shared personal testimony both to Cary and the work of Common Voices. The tournament raised over \$75,000 for the Advocates' Coalition that is determined to create a Fire Safe America.



















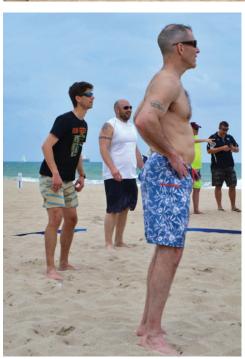


Volleyball Tournament Returns with a Splash on the Beach!

Due to popular demand, the NFSA Volleyball Tournament made a triumphant return during our conference. Teams competed for bragging rights on the private beach of the Marriott Harbor Beach Resort with Wayne Automatic taking home first prize, and Oliver Fire Sprinkler a close second. Oliver had help from some great players from Reliable in Texas and North Dakota. Thank you to New Jersey Fire Sprinkler Advisory Board for sponsoring the event!













NFSM

Coupling Design Evolution Helps Reduce Installation Time

by Sandra Lippka

Principal Engineer, Grinnell Fire Grooved Couplings, Building Technologies & Solutions, Johnson Controls and Lucas Eidenmuller, Global Product Manager, Grinnell Fire Grooved Couplings, Building Technologies & Solutions, Johnson Controls

growing trend in today's marketplace is to use preassembled grooved couplings to join pipe. These modern couplings are quicker and easier to install and are becoming the preferred method by installers. Despite the fact the fundamentals of couplings remain the same, innovation in this space has allowed for dramatic improvements to the end user.

Grooved pipe couplings were developed in the early 1900s to quickly join and unjoin pipe. The couplings typically featured two cast ductile iron segments, a rubber gasket and a pair of bolts and nuts to hold everything together. The pipe ends are prepared by adding a groove near the end using either a rolling or cutting process. The pipes can either be prepared in advance or grooved at the jobsite. The couplings have ridges called keys that fit into the grooves to secure the pipe in place. A rubber gasket is compressed between the coupling housing and outer diameter of the pipe end to create a pressure-tight seal.

To install a typical coupling, it must first be taken apart using a wrench to remove nuts that have been tightened down firmly to prevent them from shaking loose during shipping. Then the gasket needs to be stretched completely onto the first pipe by pushing it past the groove area. Next, the second pipe is brought into position and the gasket is maneuvered back over the groove and onto the second pipe until it is centered between the grooves. The housings are then positioned over the gasket and the bolts are inserted. Finally, the nuts are tightened in an equal and alternating manner until the coupling fits securely on the pipe. At many jobsites, one installer is given the task of taking apart the couplings and placing the various components into buckets to help prepare for installation.

This installation process is for the standard coupling design that was prevalent for decades. However, a new innovation focuses on a design that allows the coupling to be installed without removing the gasket or loosening any bolts or nuts. These are referred to as "pre-assembled" couplings and there are many advantages to using this type of coupling on a job site.

First and foremost, there is no need to disassemble the coupling. This eliminates preparation steps and speeds up installation. The nuts are typically held in place at the end of the bolt by a locking compound that is easily overcome during installation, eliminating the need to use a wrench for preparation or search for dropped

parts. Since the gasket is not removed from the coupling there is no worrying about ruining the seal by getting foreign particles on the gasket.

Additionally, pre-assembled couplings come with an oversized gasket, which offers distinct advantages. The larger outer diameter helps keep the coupling segments wide enough to allow a pipe end to be inserted, while the larger interior diameter of the gasket allows the pipe to be easily inserted into the gasket. This eliminates the need to stretch/pull the gasket onto the pipe. A further enhancement in most pre-assembled couplings comes from a center leg that acts as a stop to correctly position the coupling over the first pipe and help maintain its position as the second pipe is brought in. This eliminates the need to slide/pull the gasket over the groove while trying to maneuver it into place and ensures the coupling is centered over the pipe grooves when both pipe ends are installed. Additionally, the center leg acts as a tri-seal feature that allows the pre-assembled couplings to be used in dry pipe or freezer applications. Tri-seal gaskets have extra rubber in the center, which seals off the gasket cavity to prevent water from pooling within the coupling during system testing. This pooling of water could cause problems if it freezes during system use. The pre-assembled gasket center leg is compressed between two pipe ends to achieve the same cavity restriction.

Continuing the evolution of grooved pipe joining technology is the recent introduction of a one-bolt coupling. This new design offers even quicker and easier installation including all the benefits of previously pre-assembled couplings but does not require equal and alternate tightening of the nuts. Nor does it entail visually checking the coupling at both bolt pads to ensure proper, balanced installation. With a robust design to avoid pinching at the hinges, the need to tighten only one bolt provides an easy and consistent installation that benefits the fitter at the time of installation and helps ensure a strong joint. This innovative technology was designed with the fitter in mind and results in easier installations.

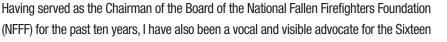
In the construction world, time is money and that is what drives aggressive schedules. Finding ways to save time will help keep the schedule on track. Using preassembled, one-bolt couplings can save workers countless hours on installation and help expedite the construction process.•

-

Saluting The Fire Chief

I am a strong supporter of home fire sprinklers as a critical component of protecting my family and others who visit our home. Residential fire sprinklers, combined with working smoke and carbon monoxide alarms, can give a person a lot of confidence that they have taken some important steps (from an engineering standpoint) to prevent a significant fire in their home, and to escape alive should a fire occur.

In 1999, Sheri and I decided to put our money where my mouth was regarding our feelings about home safety. We installed a fire sprinkler system in our new home in Mesa, Arizona - where I served as the Fire Chief for six years. I just couldn't reconcile the contradiction of being an official advocate for fire sprinklers whenever I, or the fire department, dealt with the public on fire safety...yet not live in a home that was equipped with fire sprinklers. Whenever I have been asked by the media, public officials, or even the general public, "if fire sprinklers are so important Chief, do you have them in your own home"? To this day, it is nice to be able to say, "yes...we do, and have for many years". Even when our daughter bought her first home, Sheri and I had a home fire sprinkler system installed during construction as a housewarming gift (2,900 square feet - \$3,100.00).



Life Safety Initiatives™ and the Everyone Goes Home Program™ while in that capacity. Initiative 14 addresses Public Education and Initiative 15 addresses Code Enforcement and Fire Sprinklers. Sheri and I have tried Fire sprinkler incentives are to lead by example when it comes to addressing these critical issues where we live. I can't tell you the included in tax number of times I've had the opportunity to explain the advantages of home fire sprinklers to visitors at reform, visit nfsa.org my house simply because they looked up and saw them. for the latest info



Fire Chief Dennis Compton

Leading by Example.... #fastestwater in the house

We are proud to partner with the National Fallen Firefighters Foundation, and encourage all fire departments to embrace the 16 Firefighter Life Safety Initiatives. Pay special attention to Initiative #15 "Advocacy must be strengthened for the enforcement of codes and the installation of home fire sprinklers." For more information on NFFF visit firehero.org and join with us!

www.nfsa.org #fastestwater

The National Fire Sprinkler Association is proud to partner with our nation's fire service. We continue to extend our special offer to the fire service – 6 months FREE membership (Subscriber membership category). We believe that partnerships that understand how we can help each other helps us make our communities safer and keep firefighters & citizens safe too! We want you to have the latest resources. Sign up today at nfsa.org.

Look for the Firehouse Ad icon in the bottom left hand corner on the home page.



Director of Outreach & **Government Relations** Vickie Pritchett pritchett@nfsa.org 615-533-0305 @vickiep4

NFSM ITeM

Third-Party Inspection Reporting

by Vincent Powers, NFSA's ITM Specialist



It was not too long ago when a code official needed to see a NFPA 25 inspection report, they had to visit a building owner and request the record to view, then take action if the report noted system deficiencies or impairments. The digital world has changed how a code official or Authority Having Jurisdiction (AHJ) can receive and review inspection reports. The practice of a fire sprinkler contractor

or an inspector of a contractor, uploading an inspection report through a third-party reporting platform using standards such as NFPA 25 and NFPA 72 are becoming increasingly popular in the past decade. While there are several positive aspects of the third-party inspection, test, and maintenance (ITM) online reporting, it creates several areas of concern as well. Currently third-party reporting is utilized in at least 37 states with many more jurisdictions inquiring and implementing programs.

Several jurisdictions are taking advantage of third-party ITM reporting to enforce and track system status throughout their municipalities. These reporting programs are intended for the AHJ to receive inspection reports from fire protection system service companies electronically, to identify non-compliant fire protection systems as soon as possible. This can be beneficial in many jurisdictions that do not currently inspect buildings on their own, as well as benefit the ones that do, for example:

- Reports save AHJ staff expenses in not visiting buildings that are compliant.
- Access to a list of reports submitted by contractors on line.
 They will then be able to determine the severity of a deficiency if any were cited. This allows the AHJ to either send out an automated letter to the building with a time frame for repairs or they can visit the site and investigate the deficiency on their own and take appropriate action. Some of the jurisdictions have shown a significant increase in compliance with NFPA 25 inspections and repairs since being implemented. How the reports are uploaded to the AHJ vary with each third-party reporting service company.
- Submittals or inputs to the software can be as simple as a PDF, but some providers require a specified form to be completed before being uploaded to a website. One of the items these programs may not address is the lack of resources to review reports and enforce repairs. Also, the remaining uninspected buildings across the country will still not be addressed.

These programs will only address buildings that are currently conducting inspections and that are uploaded to the AHJ.

The idea of third-party reporting seems relatively simple and has an overall appeal. There are several fire sprinkler contractor concerns when it comes to these programs such as:

- Fees and associated costs in many jurisdictions will be absorbed by the building owner or representative. There are no standardized fees for this service and fees range drastically across the country. These fees could be based on per site, per riser, per fire pump, per page or per system fee. Fees also depend on how the ordinance is adopted by each jurisdiction.
- Uploading reports is an increased workload for the contractor and AHJ, as they now must add staff to upload and review reports. Some contractors and building owners see this as a "tax" to be collected by the contractor, that is passed to the owner.
- Conflicts in relationships between contractor and customer
 may arise due to rising fees, or contractor shopping from
 owners, however if the program is being enforced properly
 then this issue should disappear, as all parties in the
 jurisdiction will be required to comply.
- Data and information security is a large concern. "How are the reports stored?" "If stored on the cloud, is it secure?" "If reports are stored on the AHJ server, what information is available through open reports laws and Freedom of Information Act (FOIA)?" These and other data security issues concern contractors and owners. Typically, once a report is filed and is in an AHJ database, it becomes public information. The public information, if released, may include contract pricing and other private contract details, but could include a variety of information such as device lists and number of systems installed in a building.

There are pros and cons to both sides of the argument depending on the individual view, but whichever side of the fence you are on, it appears third-party reporting is here to stay and is growing rapidly. The adoption of these programs across the country has the potential to boost system reliability and performance which therein benefits the contractors with an increased level of work, to AHJs with safer communities, and to building owners with operating and maintained systems. •

THINK YUU CAN EXIT YOUR BURNING HOME IN 60 SECONDS? CAN YOU RUN BLINDFOLDED WITHOUT BREATHING?

Every second counts during a fire. But thick smoke can blind your eyes and burn your lungs, which will slow you down. By giving you more time, fire sprinklers increase your chances of survival. To help save more lives, join NFSA today.



Learn more at nfsa.org





Don't Tweet While on Ambien... and other helpful hints to help you and your reputation survive in the Twitterverse

The Twitterverse shows no mercy! Unlike our universe, it is anything but a vacuum. We've seen missteps by President Trump, who has posted countless tweets that are wide open for interpretation, and often just plain wrong, so much so

that he has been called his own worst enemy. Remember "covfefe"? Recently, Roseanne Barr took to Twitter with what some called out as a racist tweet. She was quickly savaged for the tweet and her hit show was promptly cancelled. Her follow-up tweet, claiming that she was on Ambien when she posted, did nothing to repair the damage that was already done and instead, furthered the backlash she received on national news and on social media. Know when to hold 'em and know when to fold 'em applies here! Cut your losses and keep your fingers off that keyboard!

Corporations fall prey to social media missteps all the time. Kenneth Cole, Inc. tweeted: "Millions are in an uproar in #Cairo. They just heard about the new Spring collection." This brainstorm of a tweet was posted in the midst of an uprising in Egypt, where innocent men, women and children that were caught up in the violence were killed. NOT... FUNNY. Backlash was swift and the company had to apologize and remove the tweet. In the eyes of many, however, the damage was done.

You may not think that a 280-word count could do much harm, but you'd be wrong. It won't be long until the next tweet debacle involves another politician, celebrity or corporation, and it won't be pretty. Fortunately, it is possible to be active on social media and avoid a catastrophe. All it takes is a little know-how, and often, a lot of restraint!

Know what you're tweeting! Did you get a great headline in your Google Alert that you can't wait to share? Do yourself a favor and make sure you click on the link and read the entire article first. Often times, I have come across a great headline promoting fire sprinklers. When I took the time to read the article, I would sometimes find misinformation or a derogatory comment that I could not retweet.

Don't tweet when angry! We've all read articles with quotes by the fire sprinkler opposition that infuriate us, misinformation that is purposely shared to exaggerate costs or minimize effectiveness. Resist the urge to fire off a tweet in anger. I admit that my blood often reaches the boiling point when reading articles that quote a home builder saying how safe new homes are and how the added cost of a fire sprinkler system is an unnecessary expense that will drive home buyers away. Oh, do I want to take to Twitter and use all 280 characters to refute the lies! Take a breath, walk away, and remember, what you tweet out there will keep circling around like space junk in the universe, unless of course it comes crashing down in your backyard. I always remember that I am not tweeting for myself. I am tweeting for NFSA, our members and the fire sprinkler industry at large. And to quote another feisty woman, "When they go low, we go high."

Watch your retweets too! When you see a tweet you think would be great to share with your followers, check back with rule number one, know what you're retweeting! While the tweet could have been written by Shakespeare himself, it is always a good idea to click the link in the tweet and read the article the post is referring to. Make sure the article is pro-sprinkler, or is at least a balanced article with facts on both sides.

One final tip, know who your followers are! Do you know who's following you? It's easy to find out. Just go to your home page, click on "followers" and check to see who is hanging on your ever word. If you feel someone is following you just to disparage your posts, you have the power to block them. Use caution and play fair, but be aware! In the 12 or so years that I've been posting on Twitter for NFSA, I've only had to block one person. It's rare, but it happens. Here's a case where an ounce of prevention is worth a pound of cure.

The intention of this article was to get you to be a successful and safe tweeter. As I am always trying to rally the troops to dive into the social media pool, I hope these words of wisdom did not scare anyone off. Twitter can be a very valuable tool when spreading the message of the fire sprinkler concept, educating the public and even promoting your own products and services. NFSA's followers grow every day. In the past month, our tweets have made over 100,000 impressions! We have 5,078 followers. That number grows on an average of 75 per month. It is possible to thrive in Twitterverse. A little common sense, some restraint, and pride in representing the fire sprinkler industry is all it takes! Oh, one more thing, please check your spelling before you press the send button!

LinkedIn: National Fire Sprinkler Association Facebook: National Fire Sprinkler Association

Twitter: @NFSAorg

#fastestwater

July/August 2018 | 51

CHAPTERS in ACTION



The NFSA North Texas Chapter will host a joint meeting with FPANT - Fire Prevention Association of North Texas on July 11, 2018

Three Experts will present High Rise Issues and Answers. Topics will include High Rise Retrofit Ordinances, Texas Legislation, ICC Updates and FARS – Firefighter Air Replenishment Systems. Speakers include NFSA Retrofit Specialist Derek Sawyer, Jeff Shapiro, Fire Protection Engineer, and Assistant Fire Chief David Kerr.

When: July 11, 2018; Time: 11:30 a.m. - 1:00 p.m.

Where: Uncle Bucks Brewery, Grapevine

Contact South Central Regional Manager Cindy Giedraitis at cindyg@nfsa.org for more information.

New Jersey

Rutgers Day Side-by-Side Demonstration **Draws Hundreds**

The crowd listened intently as New Jersey Fire Sprinkler Advisory Board (NJFSAB) Executive Director David Kurasz spoke about the benefits of home fire sprinklers. The crowd of roughly five hundred people was one of the largest the NJFSAB had seen at this event in recent memory. Sprinklerman even made an appearance!

Upon finishing the speech, David and his team began the side by side demonstration. The crowd watched as the sprinklered room quickly doused the flames and then as the unsprinklered room reached flashover in mere minutes.

NFSA PenJerDel Chapter & Sprinkler Fitters Union Local 692 Donate Fire Sprinkler System to Rock Ministries in Kensington, New Jersey

Rock Ministries is now protected, thanks to the efforts of the NFSA PenJerDel Chapter and Sprinkler Fitters Union Local 692.

"This is huge for us," said Pastor Buddy Osborn, as he leaned against the ropes of the boxing ring at Rock Ministries. "Thanks to this sprinkler system, we're not going nowhere."

This newly installed fire sprinkler system was donated by the National Fire Sprinkler Association (NFSA) PenJerDel Chapter. King of Prussia-based Oliver Fire Protection & Security worked on behalf of the National Fire Sprinkler Association to design and provide materials for the system, which was then installed by the Sprinkler Fitters Union Local 692.

Southwest Chapters News

The Los Angeles Area NFSA Chapter met on April 19 at the Rio Hondo Golf and Event Center for lively and informational meeting with exchanges of information and NFSA reports and statewide information and updates from the Office of the State Fire Marshal and the Fire Prevention Officers.

The Arizona State Chapter held a meeting on May 15th at the Phoenix Fire Department Headquarters. The meeting was open forum style event with discussion on local issues related to the fire sprinkler industry and a report from Regional Manager Bruce Lecair. The next meetings will be held on July 10th, September 11th, and concluding the 2018 schedule on November 13th.

The San Francisco Bay Area Chapter held a meeting on May 24th at Saki's Spin A Yarn Restaurant in Fremont, California. The meeting featured reports and updates from Regional Manager Bruce Lecair and Area Director Jack Thacker.

New York

Empire Chapter Descends on Albany for Fire Sprinkler License Lobby Day

"Fire Sprinkler License" Lobby Day in Albany, New York was attended by NFSA Empire Chapter members Scott Enides of SRI Fire Sprinkler, Mickey McGregor of All Safe (Westchester), Raf Kulczynski and Eugene Leoniak of Davis-Ulmer, Ken Gonyea and Ed Delprincipe of Absolute Fire Protection, NFSA Regional Manager Dominick Kasmauskas, along with NFSA New England Regional Manager, Mike Young plus the Vandervort Group represented by Todd Vandervort and Jay Holland, who scheduled the appointments with various key legislators on this issue.



Although there is a bill for licensing of water-based fire protection contractors in session as of this writing, "movement" of various editions through the legislative committee process is almost nonexistent since 1995. Our message was to let key legislators know the industry feels the need for licensing is way overdue and we were open to any suggestions that came from legislators and staff as to how we can get traction in the next session.

CHAPTERS in ACTION

"What is the answer? We don't know yet" says Kasmauskas. "We, as the New York industry, must come together and work on a new strategy because we are well into the definition of insanity. One thing we heard time and again, 'a 20-page bill will move slowly, if at all, in a state that does not embrace licensing of construction trades."

The suggestion has been raised that industry may need to develop a one- or one and a half-page bill spelling out our "must have" parameters and put our faith in the New York State Department of State Licensing Bureau. Many stakeholders still have fears of what occurred in a neighboring state when that state was let loose to write their licensing laws. "I'm sure we can come to consensus and reach our goal next session with hard advocacy and the help of the Vandervort Group, the government relations firm the Empire Chapter now has a stout relationship with," Kasmauskas said.



In April, over 75 Illinois Officials attended three days of NFPA 25 classes in Chicago.

Illinois

NFSA Illinois Chapter Presents Appreciation Plaque to David Asplund, P.E.

The NFSA Illinois Chapter presented an appreciation plaque to **David Asplund**, P.E. upon his retirement.

From the plaque:

We hereby express our thanks and appreciation to David Asplund

for his 40+ years of dedication and expertise in developing today's modern-day fire sprinkler technology. Dave has traveled the world trying to educate its masses on dependable fire protection. In addition, David has always been involved in many roles, including: long-term member of the NFSA Engineering and Stan-



dards Committee, an alternate on NFPA 25, numerous NFPA Committees, along with ASPE and other associations. David's leadership, diligence and contributions have made a lasting effect in all positions he has served. Besides being a brilliant P.E. and innovator, he is also a great guy! It goes without saying, his type will be tough to replace.

We thank him for all his contributions to the fire sprinkler industry and to extend our best wishes to him in his retirement!

Presented this day: January 18, 2018 On behalf of the members of the National Fire Sprinkler Association Illinois Chapter Ed Kadlec, Chairman Ken Klimasz, Vice Chairman Dave Rosso, Secretary Alan Jacobs, Treasurer



Members of the Columbia-Willamette NFSA Chapter meet regularly in the Portland, Oregon area to network and discuss industry issues. Recent speakers include Daniel Wake, Product Manager at Victaulic; NFSA's Retrofit Specialist, Derrick Sawyer; and Timothy Carman, a local registered fire protection engineer and Regional Sales Manager for Janus Fire Systems.

Empire Golf Tournament to Benefit Phoenix Society Rescheduled for September 28th

You Asked, We Listened. June is a busy month, weddings, graduations, Father's Day, vacations...we get it! In response to several requests and in hopes of creating the best golfing experience for attendees, your Empire Chapter has decided to reschedule its 4th Annual Golf Tournament to September 28th. And believe me, you haven't played a game of golf until you've played it in New York's beautiful Hudson Valley in the fall! Please mark your calendars now and plan to join us at the beautiful Putnam County Golf Course in Mahopac for a great day of golf to benefit the Phoenix Society for Burn Survivors. We look forward to a successful event and to you being there! Suppliers and Manufacturers, make sure you are repped at the event! Contact me for donations to our materials auction now!

Thank you for your support of this most worthy cause and please feel free to contact me with any questions.

-Gary Lederman, Golf Chair glederman@croker.com / 914.692.3640

HQ NEWS

NFSA Retrofit
Specialist Derrick
Sawyer met with
the Grapevine and
Lewisville, Texas
Fire Marshals on
May 21 and 22 to
learn challenges
and success for
their historic fire
sprinkler retrofit
ordinances.



>>>The NFSA Code Development Team was in Philadelphia speaking at the AFAA conference and touring the Philadelphia Fire Department headquarters with NFSA Fire Sprinkler Retrofit Specialist Derrick Sawyer. Sawyer was a former chief of the department.

PEOPLE

Core & Main Names Jeff Giles VP of Corporate Development

Core & Main has appointed **Jeff Giles** as its new Vice President of Corporate Development. Jeff has more than 15 years of experience in business and corporate development and has lead or participated in more than 20 transactions totaling nearly \$1 billion. Most recently, he served as director of corporate development for Barry-Wehmiller Group, a St. Louis-based global supplier of engineering consulting and manufacturing technology. Jeff was instrumental in Barry-Wehmiller's acquisition-driven growth, helping propel the company from \$1.4 billion in annual revenue to over \$2.8 billion during his tenure. Prior to his time at Barry-Wehmiller, Jeff held the roles of vice president and director of business development at Bertram Capital, a San Mateo, Calif.-based private equity firm.

While at Bertram, Jeff was charged with developing the firm's deal origination, evaluation and marketing functions, as well as building out their intermediary network across North America, managing over 2,000 relationships at more than 700 firms. As vice president of corporate development for Core & Main, Jeff will lead the mergers and acquisitions (M&A) and corporate development functions, including strategy and inorganic growth initiatives, pipeline development, strategic evaluation, deal structure, valuation, due diligence and negotiation. •

For more information about Core & Main, visit www.coreandmain.com.

SPRINKLING OF NEWS

Johnson Controls Showcases Advanced Fire Protection Technology

Johnson Controls unveiled a new lineup of fire detection and suppression products at the 2018 NFPA Expo at the Mandalay Bay Convention Center in Las Vegas.

Products featured at the expo included:

Fire Detection:

- Autocall™ fire detection systems feature some of the latest and most advanced technology available today. With a full range of control panels and the industry's latest addressable technology, Autocall systems are flexible enough to meet the unique challenges of nearly any project.
- Simplex ES Net IP-Based Life Safety Network greatly increases the speed and ease at which fire detection and life safety systems communicate and operate. Harnessing the power of IP technology, it offers data rates up to 100MB per second and a range of network connection choices including ethernet, DSL and fiber.
- Detect360 Area of Refuge Communications System provides a reliable and effective code-compliant solution that enables occupants to remain safe and stay informed while delivering information rescuers need to get occupants evacuated quickly.

Fire Suppression:

- ANSUL® Acoustic Nozzle, in combination with the INERGEN® clean-agent fire suppression system, is designed for use in server rooms and data centers where sound levels may affect sensitive hard disk drives. The ANSUL® Acoustic Nozzle recently received UL Verification for sound performance.
 - UL will present a Verification award to Johnson Controls at 1:30 p.m. on June 12 at the UL booth #1531. UL and Johnson Controls representatives will be available for interviews following the ceremony.
- GRINNELL G-Fire One-Bolt Coupling is a pre-assembled, push-on coupling that has a revolutionary single-bolt design. It makes joining grooved pipe faster and eliminates alternate tightening – helping contractors perform quicker, more consistent installations.
- AquaMist water mist solutions reduce the amount of water required for fire suppression by producing a fine water mist designed to cool the surrounding area – limiting the spread of fire – while helping control active fires and preventing reignition.
- TYCO® continues to expand the portfolio of sprinkler system options that support storage environments. The TYCO® EG-25 Sprinkler Guard is the first FM-approved guard on the market. Coming soon, the TYCO® ESFR-22 will join the storage product line to support a ceiling height up to 45 feet.

- ANSUL® SAPPHIRE® PLUS fire suppression systems
 with 3M™ Novec™ 1230 Fire Protection Fluid offer a safe,
 environmentally-friendly, clean agent that instantly vaporizes
 upon discharge to absorb heat, quickly suppress fires and
 provide complete flooding of hazard areas.
- The SPRAYSAFE Autonomous Fire Suppression System is a fully-automatic fire identification and intervention system designed to deliver rapid fire protection for the external facade of a building. The standalone system can quickly identify and accurately pinpoint the location of the fire and deliver water to that exact location within seconds. In addition, it may use the existing building fire protection infrastructure to minimize the need for additional water supplies, pipework and pumps.

For more information, go to http://www.johnsoncontrols.com/build-ings/security-and-fire-safety.

Viking Announces Expanded Line of Foam Fire Suppression Systems

Viking Corporation has announced the expansion of its line of foam fire suppression systems. Viking now offers complete, integrated low-expansion foam solutions for the suppression of flammable liquid fires. Protected hazards include fuel storage, refineries, aircraft hangars and helipads, logistics centers, incineration plants, military installations, and jetty loading areas.

Viking's foam system components include: vertical and horizontal bladder tanks, bladder tank hose stations, and atmospheric tanks – single and double wall construction; deluge and concentrate control valves in grooved, threaded, or flanged inlet and outlet options and angle or straight-through patterns; and a variety of foam proportioning and discharge devices for a wide range of applications, flow rates, and foam system types. Viking's C6 foam concentrates include synthetic AFFF and ARC concentrates for hydrocarbon and polar solvent fires, Military Specification concentrates for high-risk applications, and Fluoroprotein concentrates for hydrocarbon bulk storage and handling facilities.

Also offered is Viking's FoamPak pre-fabricated and tested foam pumping system, which incorporates a foam pump, pre-wired pump controller, pressure sustaining valve and pressure relief valve in a UL Listed and FM Approved preassembled package. For aircraft hangar and helipad protection, Viking's patented Grate Nozzle is uniquely designed to be installed in the hangar floor to quickly distribute foam where fuel spills typically occur.

Viking foam systems are FM Approved to FMS 130 and UL Listed to UL 162, and many Viking products have also been tested to local approval standards. Details can be found on Viking's Technical Datasheets. Complete design data, technical bulletins, and product specifications can be viewed or downloaded at www. vikinggroupinc.com. A new Foam Systems U.S. Quick Reference Guide is also available to give system designers an overview of all Viking foam products.

continued on page 56



Ferguson Acquires National Fire

Ferguson Fire & Fabrication announces the acquisition of National Fire, effective May 14, 2018.

National Fire was founded in 1986 and operates two locations: Phoenix, Arizona and Albuquerque, New Mexico.

"National Fire is well-known for their expertise in sprinkler applications and offering innovative products to their customers," said Ferguson CEO Kevin Murphy. "Their knowledgeable associates will strengthen and complement Fire & Fabrication's existing capabilities in the Phoenix area."

Ferguson Fire & Fabrication, a subsidiary of Ferguson Enterprises, offers contractors an inventory of sprinkler heads and devices, special hazards equipment, fittings, pipe and hangers. Ferguson supports fire protection contractors with more than 900 highly trained associates, 67 locations and 36 fabrication facilities.

ANSUL® Acoustic **Nozzle Receives UL** Verification

Johnson Controls received Underwriters Laboratories (UL) Verification for its ANSUL® Acoustic Nozzle, making it the first fire protection product to earn a marketing claim verification for performance. This independent, science-based assessment confirms the accuracy of a manufacturer's marketing claims,



allowing customers to be confident in their product selection.

The acoustic nozzle earned the verification for this claim: "1/3 octave sound power is less than 110 dB for regulated flow and less than 113 dB for orifice flow." UL will present the verification certificate to Johnson Controls at the National Fire Protection Association Expo, June 11-14 in Las Vegas.

The ANSUL Acoustic Nozzle, in combination with the INER-GEN Fire Suppression System, is particularly useful for suppressing fires in hazards where sound levels may affect sensitive electronic equipment. The ANSUL Acoustic Nozzle passed all UL testing standards to perform as acoustically intended using exclusive sound power calculation software.

The ANSUL Acoustic Nozzle directs agent into the hazard area and reduces the sound level compared with standard nozzles. Flow calculations are used to specify the nozzle orifice size for the correct quantity and distribution of agent. This game-changing product is UL Listed with INERGEN 150, 200 and 300-bar fire suppression systems and replaces the standard INERGEN nozzle without major pipe rework or hydraulic adjustments, making it an affordable solution for retrofits.

Johnson Controls Announces Tyco® Rapid Seal Sprinkler Head Adapter

Johnson Controls announces the new Tyco® Rapid Seal CPVC Sprinkler Head Adapter. Made with BlazeMaster® CPVC compound for use in fire sprinkler systems to connect sprinkler heads to piping systems, Rapid Seal is easy to install and available in multiple sizes and styles.



With its all-CPVC design, Rapid Seal is less susceptible to dezincification in hard water environments, while also complying with growing state and federal low-lead requirements for sprinkler and plumbing systems. Further, its straight-thread adapter provides a more seamless, leak-free installation.

Additional benefits include its time-saving installation for contractors, as Rapid Seal has no thread tape or sealant, and its straight-thread design allows for flexible installation. This method provides a more precise positioning of the deflector, which is also ideal for the installation of horizontal sidewall sprinkler heads. Lastly, installation can be done by simply hand-tightening the sprinkler into place and finishing with a minor adjustment.

For more information, visit www.tycofpp.com/rapidseal. For questions or support, contact Tyco technical services at 1.800.381.9312.

Johnson Controls Announces New GRINNELL G-Fire One-Bolt Coupling

Johnson Controls announces the release of its new GRIN-NELL G-Fire One-Bolt Coupling with a revolutionary single-bolt design that eliminates alternate tightening and helps contractors perform quicker, more consistent installations with dependable product performance. Other features of the One-Bolt Coupling include:



- Pre-lubricated and pre-assembled for fast and easy push-on installation in both vertical and horizontal applications
- 360-degree contact for an exceptionally rigid joint
- Low-profile spine allows installation of coupling in tighter
- Center-stop gasket ensures proper positioning on pipe



The one-bolt coupling is UL/ULc Listed and FM Approved, with a pressure rating up to 365 psi. It is available in 2-inch to 8-inch sizes (DN50 to DN200) and is available in painted and galvanized finishes.

For more information about the GRINNELL One-Bolt Coupling, visit www.grinnell.com/onebolt. For questions or support, contact technical services at 1.800.381.9312.

Dyne Fire Protection Labs Approved by the United States Coast Guard

Dyne Fire Protection Labs has been approved by the United States Coast Guard (USCG) to test firefighting foam used in marine applications. The USCG Title 46 CFR 1.D.31.10-18.C requires foam concentrate in foam systems on board ships be tested annually to ensure its effectiveness in the event of fire.

Samples of foam concentrate sent to Dyne are tested in accordance with the USCG requirements which include the specific gravity (density), pH, percent solids and a percent estimation of dilution (if any). In addition, Dyne mixes the foam concentrate at its nominal use concentration with sea water to test the performance properties. A report is always sent within one week of the date the sample is received by the lab—a Dyne guarantee.

Grant Lobdell, Laboratory Manager at Dyne comments "The most common problem we see when testing foam concentrate is dilution with water." Because of a system malfunction such as concentrate isolation valve being left open, foam can become inadvertently diluted. If foam is sufficiently diluted in storage, it will no longer be effective at extinguishing flammable liquid fires. Other common issues with stored foam can be deterioration due to age or high temperatures, incompatible tank materials or the mixing of two incompatible foam concentrates.

Additionally, the foam can perform as designed but simply be the wrong type of foam for the hazard being protected. An example of this situation is when a ship has historically only transported hydrocarbon-based, non-polar solvents but is now carrying a polar solvent such as ethanol which requires an alcohol resistant foam—also referred to as a polar solvent foam. A standard foam concentrate is not designed to, and will not, extinguish ethanol. In order to make the testing process easy, Dyne provides a free firefighting foam marine test kit. The kit contains sample jars, paperwork, a pen and marker and a postage paid shipping label (postage is paid if sent from the continental U.S.)

Anvil International Acquires FlexHead from Atkore International Group Inc.

Anvil International has announced that it has acquired the assets of FlexHead Industries, Inc. and SprinkFLEX, LLC which manufacture and hold patents for both FlexHead® and SprinkFLEX® brands of adjustable sprinkler piping drops for fire sprinkler ap-

plications in drop ceiling spaces and other applications. "This acquisition broadens our fire products portfolio. We can now service our distribution with traditional threaded fittings, grooved fittings and couplings, and now flexible sprinkler piping. The Flexhead product suite and their sales team are great additions and we look forward to having them on our team" said Dean Taylor, Vice President of Anvil International. "Our team is very excited about bringing this world class fire protection package to the industry." "We continue to look to expand our product offering and give our customers a choice of joining methods and products. No other manufacturer offers this many options," said Tom Fish, CEO of Anvil International. "This acquisition is an outstanding strategic fit for Anvil as we look to grow our business."

Potter Announces Addition to Intelligen Line of Nitrogen Generators

Potter Electric Signal Company, LLC announces the release of the INS-100 and INS-250. These two units are the latest in the line of Potter IntelliGenTM Nitrogen Generators and are built for smaller systems with the capability of being wall hung for compact applications. The INS-100 has a bypass fill capacity of 130 gallons at 40 PSI and a total system capacity of 675 gallons. The INS-250 has a bypass fill capacity of 265 gallons at 40 PSI and a total system capacity of 1,000 gallons.

Just like the rest of the IntelliGenTM line of nitrogen generators, the INS-100 and INS-250 utilize the patent pending IntelliGenTM Controller software. This intelligent technology facilitates every aspect of the nitrogen generators including pressure, runtime, power, connectivity, and operational mode. This ensures that the unit is working at optimal performance. Using this information and proprietary algorithms, the IntelliGenTM can determine if the unit needs to be in Bypass Mode or Nitrogen Generating Mode. Also, by monitoring the generator activity, the unit can indicate development of sprinkler system leaks, user interaction, and if maintenance needs to be performed on the generator.

The INS-100 and INS-200 are available for purchase immediately. •

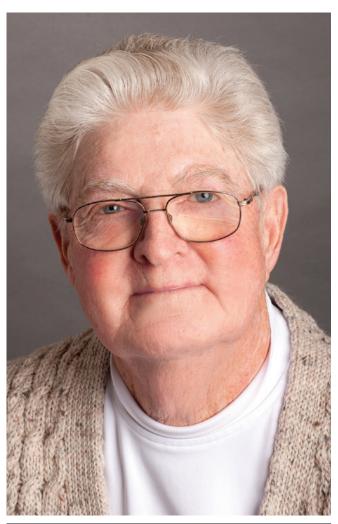


Jim "JD" Dalton

was the recipient of the James M.
Shannon Advocacy Medal at NFPA's
2018 Conference in Las Vegas. JD
received the award for his career
long commitment and passion for fire
safety culminating with his efforts
that led to the passage of the Fire
Sprinkler Incentive Act.

He was an invaluable advocate in pursuing the Fire Sprinkler Incentive Act after the Station Night Club fire in Rhode Island killed 100 people. He worked for 15 years to maintain the effort and ultimately secure passage as part of the tax reform measures signed into law by the current administration. The bill provides incentives to small businesses who install sprinklers.

We couldn't be more proud of JD and his tireless efforts to protect life and property from fire. Well deserved!









From Maine to California, and every place in between, NFSA Regional Managers bring the best of the Association right to your doorstep. Helping our members is Job #1.



New England Region

MICHAEL YOUNG Regional Manager

CONNECTICUT, MAINE, MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, VERMONT

Apartment Building Retrofitted with Fire Sprinklers Saved from Fire

Recent upgrades to an apartment building in Salem, Massachusetts ensured that a fire did not become a tragedy.

The fire, on a fourth-floor back porch was reported at 3:41 a.m., according to the Salem Fire Department. No one was injured, firefighters said.

The four-story, 20-unit brick building is owned by the North Shore Community Development Coalition. The nonprofit renovated it in the last couple of years, not long after a 2014 fire.

During the renovation, a fire sprinkler system was installed. Salem fire Deputy Chief Dennis Levasseur said the sprinklers helped keep the flames at bay Monday until firefighters arrived.

"No one was displaced, and the sprinkler system we put in last year put the fire out right away and didn't allow it to spread to the rest of the building," said Mickey Northcutt, North Shore CDC executive director.

No other units in the building were affected.

Michael Young NFSA's Regional Manager / New England email: young@nfsa.org phone: 443.743.3870



New York Region

DOMINICK KASMAUSKAS

Regional Manager

NEW YORK

NY State MWBE Update

NFSA Regional Manager Dominick Kasmauskas, and several other construction entities and associations continue to walk the halls of Albany. "We have been pleased to have so many New York legislators seem quite open to discussing the recent M/WBE Disparity Study of 2016 and what was attempted," Kasmauskas noted. The NFSA and other associations are bringing awareness and education to the legislature on the negative impact to contractors and subcontractors by a recent attempt in raising public project require-

ments to over 50% M/WBE levels for 2019 and forward (although the report recommended maintaining the present "30% levels", which were a directive, not based on fact). There was also language for a M/WBE 10% bid discount for contracts under \$1.4million.

The Assembly agreed to a one-year delay and we are pressing hard for a new and transparent disparity study and not one that seems to be done on-line through an internet survey program where only 6% of the contractors in New York State responded.

Kasmauskas is working closely with 30 other construction related industries. As of this writing, mid-May 2018, a proposal is being submitted by the coalition at a legislative hearing to fund a fully transparent disparity study and nine guidelines for future state projects to ensure contractors have all relevant information and that state agencies have factual numbers regarding disparities in each of several MBE and WBE categories.

NYC Construction Safety Training and LL196-2017

Local Law 196 of 2017 requires workers and supervisors at certain construction sites receive safety training. The safety training requirements will be phased-in in three parts beginning on March 1, 2018, with full training being required no later than September 1, 2020.

For more information on Local Law 196 of 2017, including more detailed information on the types of construction sites where training will be required and the types of workers that must be trained, visit the Department's website.

Scaffold Law Reform

In the vacuum of yet another insurance carrier pulling out of NY State, we need more than ever to voice or opinion on this 130 year-old failing law. Please assist in the New York State Scaffold Law Reform efforts by contacting your legislators. This information should be shared with employees as well because it affects them too. Unnecessary funds are being pooled due to the Scaffold Law lawsuits as it is presently written, which means less money going in all directions, including to the employees checks and retirement plans. To read more about the impacts of this terrible law (the only in all 50 states): www.ScaffoldLaw.org

Dominick Kasmauskas NFSA's Regional Manager / New York email: kasmauskas@nfsa.org 1436 Altamont Avenue Suite 147 Rotterdam, NY 12303, Phone: 518.937.6589, Fax 518.836.0210

continued on page 60





Mid-Atlantic Region

DELAWARE, NEW JERSEY, PENNSYLVANIA.

Pennsylvania Moving Forward With 2015 I-Codes and Amendments

The Pennsylvania UCC Review and Advisory Council voted to adopt the majority of the 2015 I-Codes with minor amendments. The required report has gone to the Secretary of Labor and Industry and expect an effective date of October 1, 2018 for new Pennsylvania codes

NFSA Regional Manager Dominick Kasmauskas was in attendance at the RAC meetings for two years to monitor various possible fire sprinkler issues. "The only direct fire sprinkler related item that came up", Kasmauskas reported, "is in the Amendments for the circuitry of Fire Pumps will remain in the 2009 language. The 2015 IBC 913.2.2 language was poorly written and the committee felt it could not move forward at this time with the 2018 IBC language, which NFSA testified to support the 2018 IBC language and was the best fix". Also, there is an amendment for open mezzanines in one- and two-family houses in IRC 325.5, which was updated to the 2018 language where a fire sprinkler exception for "open" mezzanines" is deleted.



Maryland Region

CALEB ARMBRUST Regional Manager

MARYLAND, VIRGINIA, WASHINGTON D.C.

Interns are a Valuable Resource at NFSA HQ

The most exciting thing to happen for the Capital Region was to see Jay Livingston receive the Golden Sprinkler Award at the NFSA Annual Seminar—Congratulations, Jay!

The state of Maryland benefits greatly from the presence of the NFSA Headquarters. Starting last summer NFSA recruited interns to spend the summer in our office and exposed them to our amazing industry. This summer we offered Layout Technician Training at Eastern Kentucky University (EKU) and had eight students participate in the class, four them are summer interns. This summer NFSA will have four students form EKU and one student from the University of Maryland (UMD). NFSA plans to have interns from various fire schools in the future and to continue sharing how much our industry has to offer. It was exciting to see one of our interns, Phil Gilman, plan a public safety day at EKU with a side-by-side burn for more than 100 students in the heart of the campus.





The CRFSA has continued our quest to renovate the valve lab at Maryland Fire Rescue Institute (MFRI) to be used by UMD students and the Maryland Fire Service. We saw how powerful a teaching tool this can be during our time at EKU when students showed a variety of valves and sprinkler devices in operation. We are grateful to all NFSA members that contribute to these labs around the country.

> Caleb Armbrust NFSA'S Regional Manager / Maryland email: armbrust@nfsa.org Phone: 443.863.4391



Southeast Region

WAYNE WAGGONER **Regional Manager**

ALABAMA, GEORGIA, MISSISSIPPI, NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE

Small Fire Causes Evacuation at Bellevue, Tennessee Senior Facility

A small fire caused a senior living facility in Bellevue to be evacuated early on a May morning.

continued on page 61



Firefighters arrived to find smoke and noted a sprinkler system had been activated inside one resident's room.

Fire officials believe a phone charger plugged into a wall got hot and ignited some clothing and paper nearby.

The fire activated the facility's sprinkler system, which put out the fire. Though everyone evacuated safely, one person was hospitalized with minor injuries.

This facility was fire sprinklered due to an action by the Tennessee State Legislature in 2005 after a nursing home fire in Nashville that took 16 lives due to a fire.

Wayne Waggoner NFSA'S Regional Manager / Southeast email: w.waggoner@comcast.net PO Box 9, Andersonville, TN 37705 Phone: 865.755.2956, Fax: 865.381.0597



Florida & Puerto Rico

LORRELL BUSH Regional Manager

FLORIDA, PUERTO RICO

AREA INTEREST MEETINGS IN July 2018

Evolution of 3rd Party Reporting

Jurisdictions across Florida are increasing the enforcement of inspection testing and maintenance (ITM) requirements of fire sprinklers, standpipes, fire pumps and more through NFPA 25. Several jurisdictions are taking advantage of 3rd-Party ITM reporting to enforce and track system status throughout their municipalities. While there are several positive aspects of the 3rd-party ITM online reporting, it creates several areas of concern and increased workload on fire sprinkler contractors. This series of meetings will discuss increased fees, data security, report form uploading, enforcement of impaired and deficient systems, results of an industry wide survey, and much more. Fire sprinkler contractors, building owners and AHJs will benefit from these area interest meetings. Presentation by: Jeff Hugo, NFSA & Vince Powers, NFSA

LUNCH Meetings begin at 12:00 NOON – 1:00 PM CHECK IN AT 11:30 AM. Breakfast meeting check in at 7:30 Meeting starts at 8:00 AM. FREE Lunch or Breakfast, FREE CEU, FREE Networking

July 9 - Jacksonville **BRAND NEW LOCATION **
Cintas Corporation, 7251 Salisbury RD. Suite 1,, Jacksonville, Fl. 32256

July 19 - West Palm

Palm Beach County Fire Rescue, Herman W. Brice Complex 405 Pike Rd., Rooms 101 & 102, West Palm Beach, FL 33411

July 10 - Tampa

Aparicio-Levy Technical College, 10119 E. Ellicott Street, Tampa, FL 33610

July 18 - Plantation

Plantation Fire Rescue, 550 NW 65th Avenue, Plantation, FL 33317

July 11 - Orlando

The Patio Grill Restaurant and Lounge* 2900 South Orlando Drive (17-92), Sanford, FL, 32773

July 23 - Ft. Walton Beach

Advanced Fire Protection, 37 Tupelo Avenue, Ft. Walton Beach FL

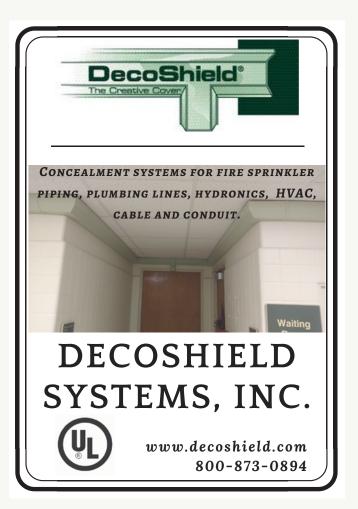
July 17 - Ft. Myers **NEW LOCATION**

Six Bends Harley Davidson, 9501 Thunder Rd, , Fort Myers, FL 3391

July 24 - Tallahassee

Tallahassee Fire Dept Training Center 2964 Municipal Way, Tallahassee, FL

July 18 - Miami *Breakfast meeting - check in 7:30 meeting starts 8:00* Milander Center, 4800 Palm Ave, Hialeah FL 33012





July 25- Gainesville **NEW LOCATION**

Gainesville Fire Rescue Training Room, 1026 NE 14th St., Gainesville, FL

Lorrell Bush NFSA's Regional Manager / Florida & Puerto Rico email: bush@nfsa.org 2025 Droylsden Lane, Eustis, FL 32726 Phone: 352.589.8402 Cell: 954.275.8487, Fax: 561.327.6366



Great Lakes Region

RON RITCHEY Field Service Coordinator

INDIANA, MICHIGAN, OHIO, WEST VIRGINIA, KENTUCKY

Sprinkler Save in Noblesville, Indiana

The owners and residents of the Flats Apartment Complex located in Noblesville, Indiana were added to the ever-growing list of ben-

eficiaries of residences with fire sprinklers. There were two separate kitchen fires that occurred in different units of this same complex on March 14th and April 19th, both of which were contained to the immediate kitchen area resulting in no injuries and very minor damage to the building.

The Noblesville Fire Department put out a press release which stated, "Once again, fire protection systems functioned as designed. The fire sprinkler system controlled the fire with one sprinkler head activated until fire department arrival, and the fire alarm system alerted all occupants of the building to evacuate. Tenants of the other four units in the building were able to reoccupy their apartments within an hour, and there was minimal damage to the affected unit. This makes the second time in the past five weeks in which sprinklers have been credited with controlling a fire in this apartment complex. The functioning fire protection systems have not only saved property but provided safer conditions for evacuating tenants and responding firefighters."

An additional gratifying piece of information of this sprinkler save is one of our long-time NFSA contractor members, Ryan Fire Protection, installed and maintains this system.

> Ron Ritchey Regional Manager, Great Lakes Region 3311 Dover Court, Lafayette, IN 47909 Phone: 765.412.6707 email: ritchey@nfsa.org







Illinois Region

BOB TINUCCI State Coordinator

ILLINOIS

Third-Party ITM Reporting Summit

NFSA, in conjunction with the Illinois Chapter of the NFSA and the Northern Illinois Fire Sprinkler Advisory Board sponsored an ITM 3rd-Party Reporting Summit in Chicago, June 19, 2018 at the Marriot Marquis Chicago. This full-day summit featured national and local experts on the topic of NFPA 25 ITM reporting to local municipalities through third-party software. Software vendors, state and local municipalities and fire sprinkler contractors presented the latest technologies, benefits, and challenges throughout the day and had the unique opportunity to openly discuss and collaborate solutions with the panel of experts.

It has been reported that the implementation of 3rd Party ITM reporting in Illinois has enhanced NFPA 25 compliance in many communities.

Fire Sprinkler Day Illinois

National Home Fire Sprinkler Day was a day of action to call out the many benefits of fire sprinklers from building, life-safety. to code tradeoffs, insurance savings, and to counter the anti-fire sprinkler false narrative groups.

Over 125 people gathered on May 19th at the Barrington FPD with host Chief Jim Kreher, Trustees and fire crews. We were happy to have NFPA Regional Director Russ Sanders, Chief Mike Mavrageorge, Director of the 13-member Illinois Fire Services Association, Illinois Fire Inspectors Association Director Bob Morris, and President Dan Riordan, Illinois Fire Safety Alliance Director Phil Zaleski, plus NFSA's Bob Tinucci and Erik Hoffer, and Tom Lia from NIFSAB as presenters.

Contractors Matt Treutelaar from Great Lakes Plumbing and Heating attended, as well as Orion's Ed Barter, Nova's Kim Prusa, United States Alliance Fire Protection's Jack French, and Cathy Lia and Candace French from NIFSAB.

The day was dedicated to the first Illinois NFPA 13D ordinance in 198,8 and to all 104 communities and fire districts who have passed residential ordinances since then. Former Long Grove Chief Dave Grupp was recognized for starting Illinois down the path of residential fire protection. Individual towns were then recognized, followed by a live fire sprinkler side-by-side demo and reading of the resolution by Chief Mavrageorge and FM Dan Riordan.

Bob Tinucci NFSA's Regional Manager / Illinois email: tinucci@nfsa.org. 6401 Richmond Avenue, Willowbrook, IL 60527 phone/fax: 630.655.1875 / cell: 630.514.1601



Wisconsin Region

MARTY KING
State Coordinator

WISCONSIN

Tale of Two Fires - Fitchburg, Wisconsin

Due to a recent Attorney General ruling and changes to the administrative code that resulted in Wisconsin changing fire sprinkler coverage in multi-family residences from three and above to 21 and above, we have seen an increase in advocacy within the fire service for fire sprinklers. The Fitchburg Fire Department posted the tale of two apartment fires on Facebook. The first fire was a kitchen fire in an unprotected apartment that caused damage throughout with a total loss of personal belongings and significant heat and smoke damage to the unit. The second fire was a kitchen fire controlled by the fire sprinkler system and confined to the stovetop. Minimal damage to the kitchen and personal belongings. Both fires were unattended cooking on the stovetop with different results. These fires were within a week of each other.

Burn Center Golf Invitational Celebrates 30 Years

The BCGI will celebrate 30 years of successful fundraising on August 27, 2018 at the Grand Geneva Golf Course in Lake Geneva, Wisconsin. This fire sprinkler industry sponsored event has donated over \$2.4 million to Ascension Columbia St. Mary's Burn Unit and the AFS Burn Camp for Youth Survivors. This could not have been accomplished without the support of the industry and dedication of the committee hosting the outing.

Outreach to Insurance Companies

Wisconsin has seen an increase in the number of request for fire sprinkler system education by the insurance industry. A presentation on fire sprinkler systems and a video demonstration of a side by side was presented by NFSA Wisconsin State Coordinator Marty King to Secura Insurance during their annual risk management conference. Over 50 people attended the presentation representing the risk management and underwriting staff. Two other requests for this presentation have been received from two Wisconsin based insurance companies.

Marty King NFSA's State Coordinator email: king@nfsa.org 3317 South 113th Street, West Allis, WI 53227 Phone: 414.531.9542

continued on page 64





Minnesota Region

TOM BRACE **State Coordinator**

MINNESOTA

Burn Aid Golf Event Update

The Minnesota Chapter is in the process of creating a 501 c 3 organization to administer the Burn Aid Golf Event on October 1, 2018 at Dellwood MN. An attorney has been hired to help the Chapter through the IRS process. The Chapter has given over \$900,000 to the Regions Hospital's Burn Unit in the last 21 years. This new organization should enable more flexibility for the Chapter as it moves forward.

Minnesota State Coordinator Brace has been asked to write a story for the Minnesota Fire Chief Magazine that tells of his experiences retrofitting a home built in 1939 with a 13 D Sprinkler System. Brace has been a long-time sprinkler advocate and felt the need to be able to raise his hand when asked if his home was sprinklered.

> Tom Brace NFSA's Regional Manager / Minnesota email: brace@nfsa.org 1433 Idaho Ave West, St. Paul, MN 55108, Phone: 651.644.7800

Central Region

IOWA, KANSAS

Lack of Fire Sprinklers Cited as Discarded Cigarette **Causes Massive Fire in North Kansas City Office Building**

An improperly discarded cigarette caused a massive three-alarm fire that ravaged an office building in Kansas City. Dry conditions and wind propelled the fire, officials said. Fire officials called in the Bureau of Alcohol, Tobacco, Firearms and Explosives to help with the investigation.

ATF spokesman John Ham noted that it is very rare to determine a fire's cause so quickly. But because the fire broke out around 12:30 p.m., there were many witnesses and others who used their cellphones to take video of the fire, he said.

The cause was accidental and there is no criminal investigation, Ham said. He said he did not think it was possible to pinpoint who discarded the cigarette.

North Kansas City fire Chief Dave Hargis said the fire traveled up the wall and got trapped in several void spaces in the attic. One of the spaces was vented from the outside, and wind drove the fire throughout the attic.

The 21,000-square-foot Pioneer Building houses 13 businesses. When built in the early 1900s, it was part of the beginning of the development of North Kansas City's central business district, according to historic records.

The building did not have sprinklers, officials said.

Missouri Region

MISSOURI

Fire at Assisted Living Facilty Controlled by Fire Sprinklers

A fire at a St. Louis assisted living facility was controlled by fire sprinklers. The fire was contained to the eighth floor, according to authorities.

"The alarm was sounding which means the sprinkler system was activated and there were heavy smoke conditions on the eighth floor," St. Louis Park Assistant Fire Chief Hugo Searle said. "The fire was controlled by the sprinkler system and was extinguished completely by the responding crews."



South Central Region

CYNTHIA GIEDRAITIS **Regional Manager**

ARKANSAS, LOUISIANA, OKLAHOMA, TEXAS

Thank You, Ricky Jackson!

After many years of service, Ricky Jackson, Vice President of Northstar Fire Protection, is retiring from the NFSA Engineering & Standards Committee representing the South-Central Region. Ricky Jackson joined Northstar in May 1986. Ricky served as Vice President and assumed the Dallas Branch Mangers position in 1992. He joined as a partner in Northstar Fire Protection of Texas, Inc. in 2002.

Conor Kauffman, who has served as the E&S South Central Alternate; will become the South-Central E&S Primary Representative.



Texas Fire Chief Helps with Fire Protection Tax Reform Fire Chief Randy Parr, of Tomball Texas, hosted a meeting with Kevin Brady, Chair of the U.S. House of Representative's Ways & Means Committee in Washington, D.C.

Chief Parr discussed Fire Sprinkler additions to the Federal Tax Reform Bill with Andy Quinn - NFSA Lobbyist, Chief Shane Ray, NFSA President, U.S. House of Representative Kevin Brady, and Vickie Pritchett, NFSA Director of Outreach and Government.

> Cindy Giedraitis NFSA's Regional Manager / South Central email: giedraitis@nfsa.org PO Box 10403, College Station, Texas 77842. Phone: 979,324.8934



Great Plains Region

ROBERT GEISLINGER
Field Service Coordinator

COLORADO, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA, UTAH, WYOMING

Indian Hills, Colorado Fire Board Considers Requiring Fire Sprinklers in New Homes

While Indian HIlls, Colorado's Fire Board has a current resolution that requires fire sprinklers in new homes or construction exceeding 1,500 square feet, the board chose to table its decision after it became clear there was more to consider before finalizing the resolution.

The resolution was suggested by Fire Marshal Randy Rudloff, in part because of Indian Hills' reliance on water supplied by Indian Hills Water District's hydrants, which are primarily in the older portions of the fire protection district. A majority of new construction is happening outside of the water district.

Board members and Rudloff now agree that the resolution should require sprinkler systems in all new construction, not just those that exceed 1,500 square feet.

"I would prefer the way the IRC reads it: All new construction, no matter what square footage, would have a sprinkler system," Rudloff said. "That is what I would prefer."

> Rob Geislinger Field Service Coordinator / Great Plains Region Office: 845.878.4200 Direct: 443.312.2206 Cell: 720.457.9292



Southwest Region

BRUCE LECAIR

Associate Director of Regional

Operations - WEST

CALIFORNIA, HAWAII, NEW MEXICO, NEVADA, ARIZONA

Honolulu City Council passes "Mandatory" Fire Sprinkler Bill That Allows High-rise Condo Owners to Opt Out

The Star Advertiser posted on May 26th that a bill passed by the Honolulu City Council requires about 150 older high-rise condominiums to be retrofitted with automated fire sprinkler systems. Except that it really doesn't. The final version of Bill 69 (2017)

allows condominium associations to opt out of installing fire sprinklers either in hallways or individual units so long as they meet the minimum requirements of the fire safety evaluation forms that would be filled out



by a licensed architect or engineer and then submitted to the Honolulu Fire Department. Those who choose to opt out could still end up paying more to make other safety improvements necessary to pass the evaluations, said Assistant Fire Chief Socrates Bratakos.

The vote on was 8-1. Councilman Ikaika Anderson, the lone "no" vote, said he philosophically opposes the idea of requiring property owners to install sprinklers if they preferred to accept the risk of living without them.

About 368 residential towers, totaling about 38,000 to 39,000 units, do not have fire sprinklers, according to fire department estimates. All were built before 1975, which was when the city first mandated fire sprinklers in all new residential high-rises.



April Joint FPO/SFPE Meeting a Huge Success!

The Irish Cultural Center in San Francisco was where it was at on April 27th as NFSA sponsored the Annual Joint NorCal Fire

continued on page 65



Prevention Officers/San Francisco Society of Fire Protection Engineers Meeting with NFSA Vice President of Engineering Mark Hopkins in attendance to give a presentation on the on Changes to the NFSA Engineering website and updates and news in the upcoming codes.

The event was a great venue for the 12 California Supply and Manufacturers who gathered to support the event organized by Southwest Regional Manager Bruce Lecair who sponsored the event on behalf of NFSA. Those who attended and showed off their product lines were, Spears Manufacturing, Eaton-Tolco, Lubrizol, Victaulic, Flexhead Industries, Knox Company, Smoke Guard, Repcor/Watts Water Tech, Globe Fire Sprinkler, HD Supply, Pace Supply and Hydrogen Innovations. Thank you for your support!



The meeting was also an important day for the Northern California/Nevada Chapter of the Society of Fire Protection Engineers who awarded the 2018 Annual Academic Scholarship to five students in fire protection engineering programs across the country: The purpose of the scholarship is to support Fire Protection Engineering students from the greater Northern California/Nevada Region, and to promote the expansion and advancement of the Fire Protection Engineering profession.

> Bruce Lecair NFSA's Associate Director of Regional Operations / West email: lecair@nfsa.org 25417 West Hyacinth Street, Corona, CA 92883 Phone: 951.277.3517, Fax: 951.277.3199

Renton Regional Fire Authority, the Washington State Residential Fire Sprinkler Coalition, the Puget Sound NFSA Chapter, and the Washington State Fire Marshal Office combined forces on the first Home Fire Sprinkler Day in May



Northwest Region

SUZANNE MAYR **Regional Manager**

ALASKA, IDAHO, MONTANA, OREGON, WASHINGTON

Greg Shaughnessy, Marketing Manager for Pipe Hangers for Anvil International, will be the guest speaker at the August 14 Puget Sound Chapter and August 15 Columbia-Willamette Chapter meetings. Greg brings over 22 years of experience in the fire sprinkler industry related to hanging and seismic bracing of fire sprinkler systems.

The Fire Sprinkler Advisory Board of Puget Sound and U.A. Local 699 will be hosting the annual Sprinklerman Shootout on Saturday, Aug. 18. This year's event features the second course at Willows Run in Redmond.

The code review and adoption process is underway in Oregon and Washington. If you have input or questions, please call or email Regional Manager Suzanne Mayr.

> Suzanne Mayr NFSA's Regional Manager / Northwest email: mayr@nfsa.org P.O. Box 7328, Tacoma, WA 98417 phone: 253.208.8467



The Columbia-Willamette Chapter meets regularly in the Portland Oregon area.



LETTERS

TO VICKIE PRITCHETT

Vickie,

I just wanted to take a minute to thank you again for the tremendous time last week in Ft. Lauderdale. I can't thank you enough for the work you put in before the conference to get us the Tuesday and Saturday nights at the hotel.

But not only that, please thank your staff for all the hard work they put in to make the conference a great success. The sessions, speakers, dinners etc. were first rate.

We don't get to go every year to these events, but I will say that every time I've had the opportunity I always return rejuvenated, motivated and inspired and that's a credit to the entire NFSA staff and all that you guys do for the sprinkler industry!

I hope everyone made it home safely and we look forward to Nashville next year which is only 3 hours from our office!

Thanks Again!
Pete Lenzini
F.E. Moran Fire Protection

TO SUZANNE MAYR:

Suzanne,

I am following NFSA accounts on Twitter. I truly appreciate the amount and quality of information that NFSA posts - it is very informative and highlights fire sprinkler success stories, which is exactly what we need more people to see and be aware of!

Nick Bakic Accel Fire Systems, Inc.

TO LORRELL BUSH:

Ms. Bush:

I would like to express my sincere appreciation for your participation in the 2018 Boynton Beach Fire Department Firefighter Youth Academy. Your demonstration had a significant impact on our participants and their parents You and your association were the "talk of the town" during the week of training and fun. As the Fire Chief, it is humbling and refreshing to witness your association's level of commitment to public safety by raising awareness of the trauma and tragedy caused by residential fires. Boynton Beach Fire Department would like to express our gratitude for your participation in our awareness program.

I included a photo of the "Class of 2018" as a way of showing our heartfelt appreciation, a thumb drive with our graduation video, and a Boynton Beach Fire Rescue Challenge Coin as a keepsake.

I hope you enjoy the video and again, thank you very much for your generous support of public safety and our mission to reduce mortality and morbidity caused by residential fires.

Sincerely, Glenn Joseph Fire Chief

TO VICKIE PRITCHETT:

We stumbled on your article about the Trump Tower fire and we thought it was of importance to our audience. We wrote an article -- largely inspired by your piece -- here: http://www.usabusiness-radio.com/trump-tower-fire-exposes-a-lack-of-sprinkler-systems/ We will be talking about it on the nationally syndicated radio show, The Price of Business. www.PriceofBusiness.com Great information and keep up the good work.

-USA Business Radio

TO LORRELL BUSH:

Lorrell,

The class offered at Advanced Fire Protection this week, ITM: What Role Do You Play? was awesome like always. Very informative, there is no way we could not learn something from John Corso, he is an incredible teacher. Special thanks to Mike Brown, Advanced Fire for opening his training room to other companies and AHJ's. I don't really know what we would do without these classes! We had a couple new guys there, they brought a lot back with them. Thank you Lorrell for all the hard work!

Mary McMillan Inspector Hiller Companies

TO LORRELL BUSH:

John Corso just finished a two-day ITM class at our shop. He is the best in the business!!! Thank you, John, for everything you do for AFPS and the industry. Truly one of the most valuable assets of NFSA.

Mike Brown Advanced Fire Protection Services Ft. Walton Beach, FL



National Fire Sprinkler Magazine

The Flagship Publication of The National Fire Sprinkler Association

NFSM Article Submission Guidelines

National Fire Sprinkler Magazine (**NFSM**), a members-only publication of the National Fire Sprinkler Association, is published six times a year. It offers Fire Sprinkler Industry news and articles of interest to Association members.

Query

Send an e-mail or letter briefly describing your article proposal, why the topic is important, and how it is relevant to our audience. Say something about the sources of your information (personal involvement? interviews?) and about your present position and background. Tell us what types of photographs and graphics are available to illustrate your story. Be sure to include an email address and a daytime phone number. **NFSM** runs full-length feature articles of approximately 800-1200 words.

Feature Articles

Articles for **NFSM** should be on a topic of significant interest to the industry. Articles promoting a specific product or service will not be published. We have advertising opportunities available to boost your sales.

Writing Guidelines

NFSM tries to maintain a straightforward style. Accuracy is vital. All facts should be double-checked before a manuscript is submitted. All manuscripts must be submitted as Word docs, single-spacing between sentences. <u>Images must be submitted as separate hi-rez ipegs</u>. Charts and tables must be submitted as separate pdfs.

Each manuscript should be accompanied by a list of resources on the topic at hand: relevant books and reports, conferences, and/or contact people and their phone numbers. To settle points of style, use *The Chicago Manual of Style* (University of Chicago Press).

Illustrations

NFSM uses a variety of photographs, line art, charts, and maps. We prefer to receive artwork electronically, and all illustrations should include credit and caption information.

Copyrights

Articles must be exclusive to **NFSM** magazine and not submitted to any other industry publication, unless prior agreement has been reached. Author is responsible for the accuracy of article and that it does not infringe on any other copyright. All published submissions become the property of NFSA.

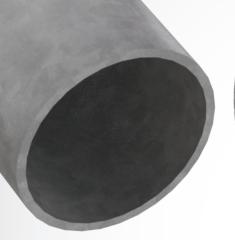
Payment

NFSM does not pay for articles; we do recognize an author with a byline and credit. NFSA reserves the right to reject any submission at its own discretion.

NFSM EDITOR:

Joanne Genadio genadio@nfsa.org 443.863.4399

FLEXHEAD® SUPERFLEX **THE TOTAL TO THE TOTAL TO





TRUST THE ORIGINAL™

The Ultimate Solution in Flexible Fire Sprinkler Drops

- No need to measure the bends of the SuperFlex™ hose during final inspection 2" Bend Radius!
- Available with "cut groove" for connection with coupling
- Only fully welded commercial fire sprinkler drop in the industry
- UL Listed for a maximum of 12 bends for 6' hose



Scan For More Details!

SuperFlex[™] allows for quick installation and inspection, saving you time and money!

800-829-6975 flexhead.com





SMITH-COOPER INTERNATIONAL AND FPPI: **PARTNERS IN FIRE PROTECTION**

For close to three decades, our distributor partners have been our greatest inspiration. Their commitment to the fire sprinkler industry, and to continually improving the way they serve their contractor customers has provided us with invaluable input and ideas to improve our products, processes, and standards. Moving forward, we will continue to serve them with industry-leading customer service, a superior logistics system and an ongoing commitment to the distributor channel. Thank you for choosing Smith-Cooper International and FPPI.

Explore our whole product portfolio at smithcooper.com and fppi.com or call +1 (800) 344-1822



